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PRIME & Mc KEAN'S
MANUAL
FOR
GAUGERS & LIQUOR DEALERS.

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MANUAL

ACCOMPANYING

PRIME & McKEAN'S

Combination Gauging Instrument,

(U. S. Int. Rev. Standard.)

CONTAINING

DIRECTIONS FOR THE USE OF THE SAME:

ALSO,

Rules and Regulations for Inspecting and Gauging,

TOGETHER WITH

Numerous Tables, &c., &c.

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PREFACE.

In presenting the Combination Gauging Instrument and accompanying Manual to gaugers and the trade, we feel assured that we place in their hands one that will insure accuracy and uniformity, thereby effectually preventing all those errors and complications which have heretofore engendered so much trouble and strife among professional gaugers and merchants, and which have entailed so many pecuniary losses on the latter.

A long and extensive experience as practical gaugers has convinced us of the absolute need of improvements in the implements for gauging, and the Prime & McKean Gauging Instrument is the result of much time and labor expended in sincere and diligent efforts to supply a want long felt by ourselves as well as other gaugers while at work.

The instrument having been examined and tested by a board from the "American Union Academy of Sciences," and having subsequently, after thorough practical tests, been adopted and declared the "Standard," to be used by all United States internal revenue gaugers, we confidently recommend it to the gauging fraternity and all dealers in liquids as the most reliable, convenient, and best gauging instrument now in use.

The rods upon which the attachments are adjusted are made of wood, and also of German silver. To those whose instruments are much exposed to damp weather, or who have large quantities of spirits or other liquids to gauge at one time, we recommend the silver rod, as all wood instruments are more or less liable to swell when exposed to damp.

The instruments are duplicates of each other, and any of the parts that may be lost or broken can be supplied by the manufacturers upon application.

The Manual that accompanies each instrument will be found invaluable to the gauger. It contains tables in which all the calculations are made for finding the capacity of casks; the ullage or outs; the number of proof gallons contained in any given quantity of spirits above or below proof, together with instructions and rules for gauging extra-sized casks, vats, tanks, &c., &c.

It is not the object of this work to give a thorough knowledge of the principles on which the system of gauging is based, but simply to give such explanations and rules as will enable any one of ordinary intelligence to perform the duties of gauger correctly and efficiently.

EXPLANATORY DIRECTIONS.

The Capacity Table, running from page 17 to 79 of this book, shows the number of gallons required to fill any cask the length of which is found in inches and tenths of inches in the left-hand column, and the mean-diameter in inches and tenths *at the top of the page.*

Therefore, in order to find its capacity, you must find the *length* and *mean diameter* of the cask. To find the latter correctly, you must measure the head and then the bung diameters, and add a proportionate amount of their difference to the head, which gives the mean diameter, or, in other words, reduces the cask to a cylinder.

We will now briefly explain to you the use of the instruments, and tell you how to find the correct capacity of casks.

The instrument combines the Caliper, for taking the length of the cask; the Head Rod, for finding the diameter of the cask at the head; the Bung Rod, for finding the diameter at the bung; the Mean-diameter Slides, for computing the mean diameter after the head and bung diameters are found; the Wantage Rod, for ascertaining the number of gallons out of a cask, and the Straight Rod, for finding the approximate capacity of a cask by diagonal measurement.

By examination the gauger will find the inventors' stamp on each part, and if they are combined so that the stamps on all the parts appear in line along the same side of the instrument, they are properly adjusted.

THE CALIPERS.

Figure 3 represents the instrument as calipers, the arm on the left of the plate being secured to the end of the rod by means of a spring bolt, while the other arm is movable along the rod.

In taking the length, the rod should be held on a horizontal line with the cask. The proper position can be secured by allowing the braces to rest on the cask, the ends of the arms or slides touching the heads at a point about equi-distant from the centre and chime. The length is read in inches and tenths of inches, on the upper face of the rod, at the inner end of the movable caliper slide. Great care should be observed in taking the lengths. There should be no unnatural *jerking* or *forcing* the slides against the cask, but, to secure accuracy, they should be moved with ease and gentleness.

HEAD ROD.

Having found the length and noted it on the cask with chalk, remove the caliper arms, and you have the head rod, as shown in figure 1. Place the point of the rod against the lower chime and draw the head slide up until the arm strikes the chime opposite the point of the rod. Holding the rod diagonally across, move it gently around the chime, so as to get the *mean* of the head diameter. Then move the long slide down until the lower point touches the top of the head slide. Secure the long slide at this point by means of the thumb-screw at the top. As you now have the head diameter noted on the rod, remove the head slide, and it is now a

BUNG ROD,

and you can proceed to take the bung diameter.

Let the mean-diameter slide remain, as secured by the thumb-screw, and place the rod in the cask as shown in figure 2, the point resting on the bottom

stave. Draw the over slide up until the lip or jut strikes the bottom of the bung stave. Keep the over slide firmly in place, and carefully remove the rod from the cask.

At the bottom of the over slide, on the A column of the scale, will be found *the difference* between the *head and bung diameters*. By the side of this number on B will be found the proper amount to be added to the head, (for casks of the second variety.) Then look for this latter number on A, and on the adjacent side of the *rod*, opposite said number, will be found the *mean diameter* of the cask in inches and tenths of inches. (In reading the A column always count the line above the figure.)

Example.

Suppose a cask of the second variety to measure at
The bung, 23.4. (See rod, bottom of over slide in figure 4.)
The head, 18.6. (See rod, bottom of long slide in figure 4)

Difference, 4.8. (See bottom of over slide on scale "A," figure 4.)

4 8 × .63* = 3. Add to the head 18.6 = 21.6 mean diameter.

Set lower end of long slide at 18.6, and the over or bung slide at 23.4 *on the rod*. On the face of long slide on scale "A" (at the bottom of over slide) will be found 4.8, and on scale "B" 3. Move the over slide down until the bottom rests on the line over the figure 3 on scale A, and opposite said figure on the adjacent side of the rod will be read 21.6—the mean diameter by the second variety.

If the cask is classed in the 1st variety look on scale "D," and if in the 3d variety look on scale "C" for the amount to be added to the head.

Having found the mean diameter to be 21.6, suppose that by measuring the cask, as shown in figure 3 and as before described, you find the length to be 28.4. Turn to page 40, and look at the top of the page for the mean diameter 21.6, and down the left-hand column for the length. At right angles with the two amounts you will find the capacity of the cask — 45 wine gallons.†

WANTAGE ROD.

Should the cask when gauged be only partly filled, the quantity required to fill it will be found as follows:

Move the long slide towards the head of the rod until the upper end of the same reaches the division line between the wantage and straight-rod scales, and secure it by means of the thumb-screw. Insert the head of the rod into the bung until the lip touches the under side of the bung stave. The rod being removed, the wantage scale, at the point reached by the liquid, will indicate the number of gallons required to fill it, which, taken from its capacity, gives the actual contents.

STRAIGHT ROD.

By removing the slides you have the ordinary Straight Rod or wine-gallon scale for taking the capacity by diagonal measurement; but as this mode of gauging is so seldom correct, and its practice attended with so much danger, *its use is strictly prohibited in the revenue department*, and should be discountenanced by all gaugers and the trade, as no reliance can be placed on it, especially when it is used by any others than experts, and even then no uniformity can be obtained, as no two expert gaugers will agree as to the amount to be "*added to*" or "*thrown off*" the capacity indicated by it. It is only placed

*The multiplier for second variety.

† NOTE.—In all cases (except internal revenue gauging, where the amount of tax is to be estimated,) the amount found by the above operation is to be cut on the bung stave as the true capacity. Revenue gaugers are required to correct the volume, according to the temperature of the spirits.

here as a means of test, in case the gauger thinks he has made any considerable error, as by it he may find an *approximate capacity*.

MEAN-DIAMETER SCALE.

The mean-diameter slide has four scales, marked, respectively, A, B, C and D. The scale A is a simple scale of inches and tenths of inches, working in harmony with a similar scale on the rod, and is used for adding and subtracting. For instance: If you wish to add 4.7 to 18.7, set the lower end of long slide at 18.7 on the rod, and the bottom of over slide on the line over 4.7 on A. The rod at bottom of over slide will read 23.4. To subtract, set the slides at the given dimensions and look on scale A for their difference, as in the present case, 18.7 from 23.4 leaves 4.7.

The scales B, C and D represent the amounts to be added to the heads, according to the curve of the staves, which determines the variety, and as the outlines of each shape are given in the figures marked 1st, 2d and 3d varieties, no trouble will be experienced in determining the proper scale to be used in any given case.

As it has been ascertained that the majority of spirit casks and all other barrels of like shape are correctly gauged by the second variety scale, the gauger should confine himself to the use of that variety, except in cases where he sees a decided difference in the curve of the stave, as shown in figures marked 1st and 3d varieties.

Whenever the gauger finds it necessary to use either the C or D scales, he should cut the number of the variety in which the cask is classed on the stave immediately over the wine gallons, as follows:

A cask ganged by the 1st variety scale (D.) Capacity forty gallons and one-half gallon to be allowed out, should be marked $\frac{1}{40}$ ½

A cask of same capacity, &c., in second variety scale, (B,) 40 ½

A cask of same capacity, &c., in third variety scale, (C,) $\frac{3}{40}$ ½

GAUGERS' DUTIES.

The newly-commissioned gauger will find it advantageous to place himself under the instruction of some experienced gauger, in order that he may the more readily acquaint himself with the duties of his office As this is frequently impossible in the revenue department we offer the following advice, based upon Official Regulations:

In gauging at distilleries the gauger should see that the barrels are properly drained, as water is invariably left in them by the cooper, and in cold weather he should try each cask with his rod, as ice is frequently caked in them, and does not melt and diffuse itself through the spirit until after it has been gauged and proved. After they have been thus examined arrange them in rows, heads up, and cut or burn the serial numbers, letting the lowest numbers go to the cistern first, and the others in their proper order. This will greatly facilitate work, and lessen the liability to error in attaching the stamps. While they are upheaded the name of the distiller and the number of the district may also be burnt on. In order that the strength of the packages may be uniform, the spirit should be well stirred before it is drawn from the cistern. After they are filled, gauge and ascertain the wine gallons in the manner hereinbefore described, and mark them with chalk on the cask. Prove each cask separately, and cut the strength on the bung stave, at the same time noting the correction

to volume, which will be found in the right-hand column of the "Inspectors' Manual."

Then copy the marks in a book kept for the purpose, as follows:

Serial No. of cask.	No. of stamp.	Wine gallons.	Wantage.	Indication.	Temperature.	Correction to volume.	Wine gallons corrected.	Strength.	Proof gallons.	Taxable gallons.
2707		44½	½	108	55	0.2. Add.		110		
2708		45	½	117	77	1.0. Sub.		110		

From this estimate the true contents of each cask, as follows:

Capacity of cask	44.50
Less ½ gallon allowed out	.50
	44.00
Multiply by correction to volume	0.2
	8.800

True contents in wine gallons at 55° temperature and 110 per cent.* $\left\{\begin{matrix}44.00\\44\ 08\end{matrix}\right.$

This will be entered in the column for "Wine gallons corrected" as 44, and be cut on the bung stave $44\frac{1}{2} - \frac{1}{2}$. See figure 8.

Another:

Capacity of cask	45.00
Less ½ gallon out	.50
	44.50
Deduct correction to volume 1 per ct.	.44

True contents in wine gallons at 77° temperature and 110 per cent. *44.06

This will also be entered in the column for "Wine gallons corrected" as 44, and cut on the bung stave as $45 - \frac{1}{2}$ 1 —, showing capacity, outs, and corrections to volume.*

After correcting the volume on all the casks gauged, and entering their true contents in wine gallons in the proper column, turn to Table No 2, and look down the left-hand column for the strength and at the top of the page for the corrected wine gallons, and at right angles with the two will be found the proof-gallons, (see page 114, on the left 110 at top 44 = 48.40,) which will be entered in the proper column.

After correcting the wine gallons, and finding the proof and taxable gallons, his book will read as follows:

---

*According to Regulations the gauger may elect to cut on the cask the corrected wine gallons, or the capacity, (as shown in "Wine gallon" column.) outs, and corrections to volume. The latter is much preferable, as it shows the work complete, and will often save the gauger from unjust criticisms. The regulations also require that "*after having made this correction of volume and the allowance for wantage, should there be a fraction of a wine gallon less than* THREE-TENTHS, *it will be* DROPPED; *if* THREE-TENTHS, *or any intermediate fraction to* SEVEN-TENTHS, *it will be called* A HALF; if ABOVE SEVEN-TENTHS to the unit it will be called a WHOLE GALLON."

Shapes of Casks.

Fig. 1.

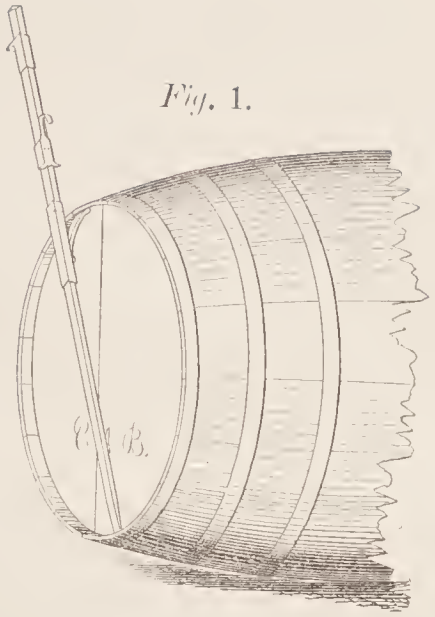


Fig. 2.

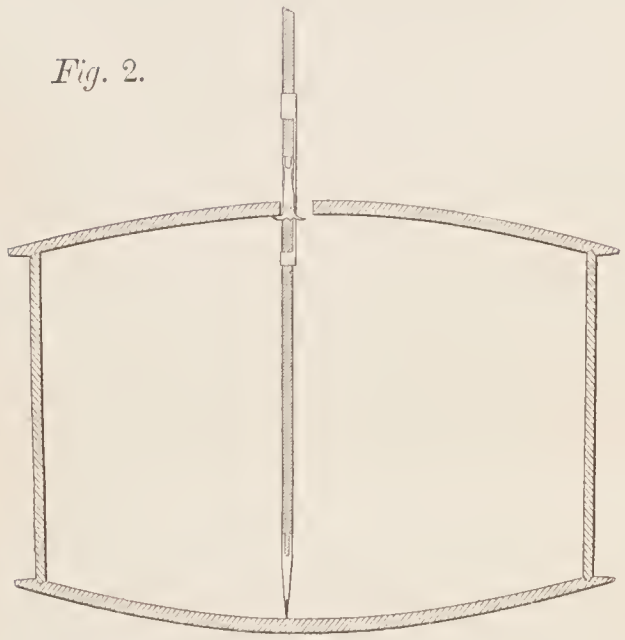


Fig. 3.

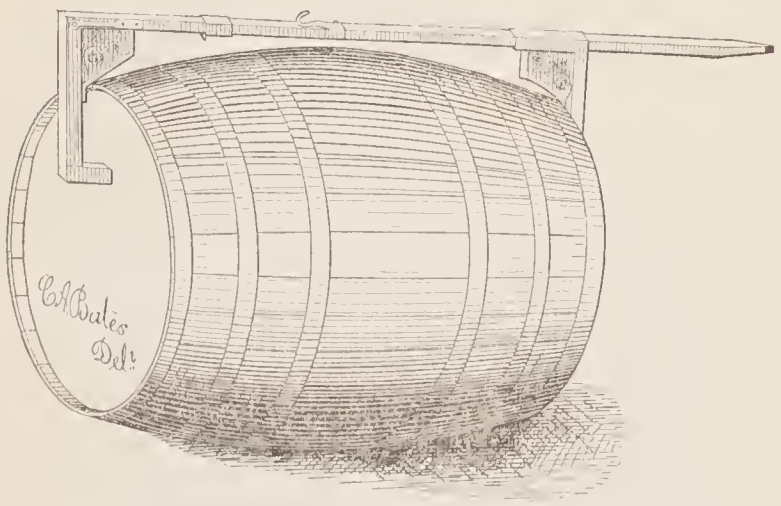
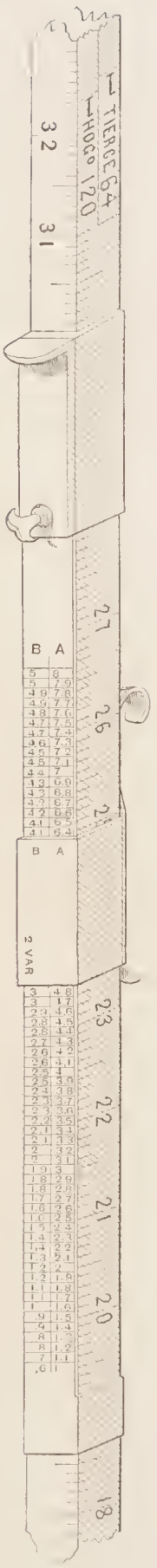


Fig. 4.



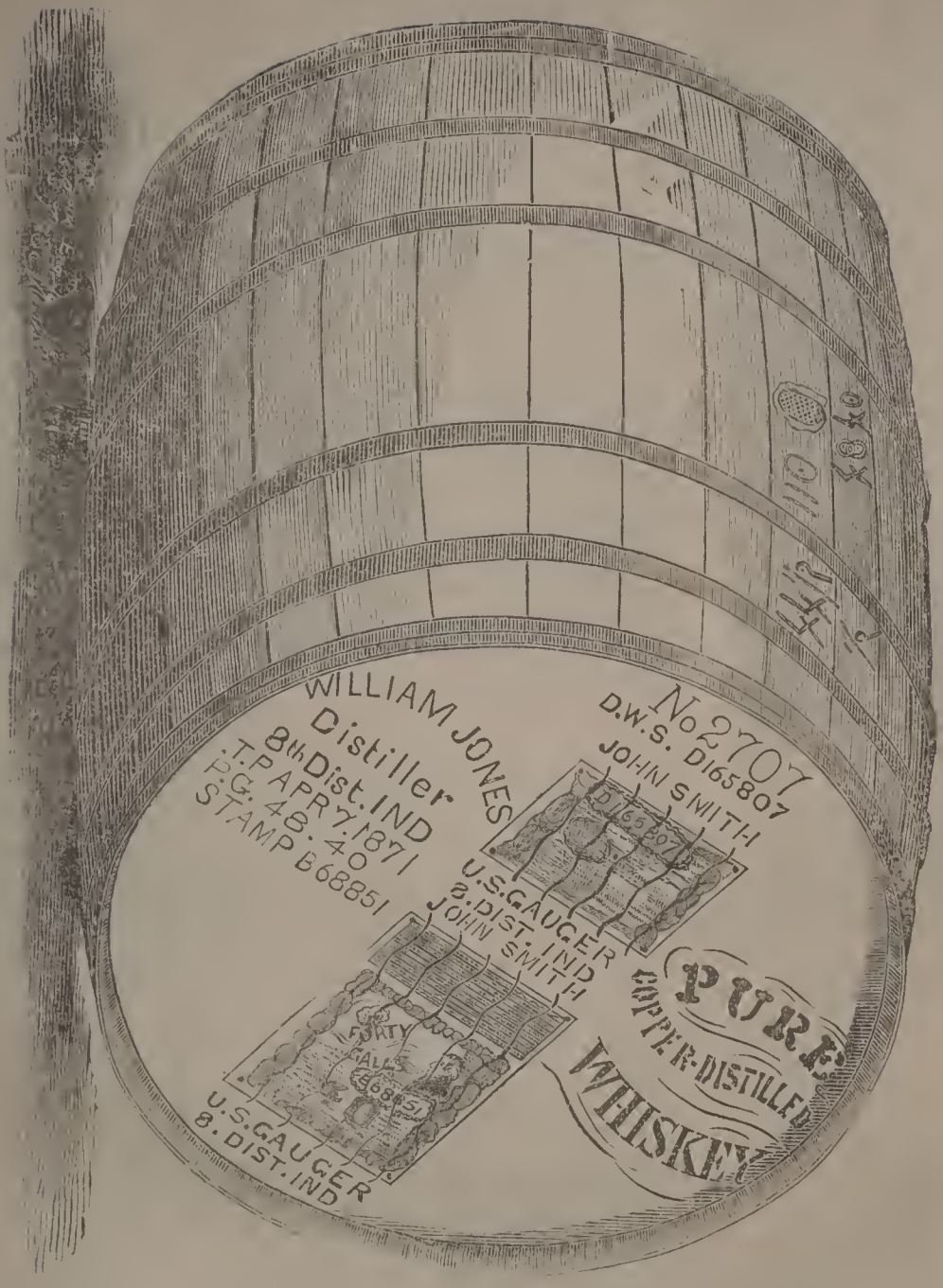


Fig. 8.

Figure 8 represents an original tax-paid package, with marks and brands complete, and corresponds with the first example given on page 6. In the case of the second example, the marks and brands on the head of the cask would be identical with those shown on the above cut, except the number of cask and stamps. The wine gallons would be cut on the bung-stave 45 — $\frac{1}{2}$ — 1, showing the capacity, outs, and correction to volume. The cancelling stencil must, in all cases, be of sufficient length to allow the canceling lines to extend over the stamp, on the wood, not less than three-quarters of an inch.

Fig. 9.

Figure 9 represents the head of a wholesale liquor dealer's package, where the spirits have been taken from an original or distillery package. (Compare marks and brands on figure 8.) The marks and brands here shown are substantially the same as prescribed in Series 5, No. 7, Supplement 1. All of the stenciling around the stamp, except the numbers and dates, are cut on the cancelling stencil, and are put on by one application of the brush.

The wholesale dealer's stencil may be so cut as to change the distiller's name, number and date, at pleasure.

Fig. 10.

Figure 10 represents the head of an original rectified package, with the necessary marks, &c., so arranged as to facilitate the work of the gaugers. The law requires that all spirits "leached through coal, re-distilled, refined, compounded, or snbjected to any process, which would constitute the person using it a rectifier as defined by law," must bear the stamp for rectified spirits.

The presence of this stamp is not, therefore, a guarantee that the spirits contained in the package have actually been ratified in the sense in which the word "rectified" is used by the trade.

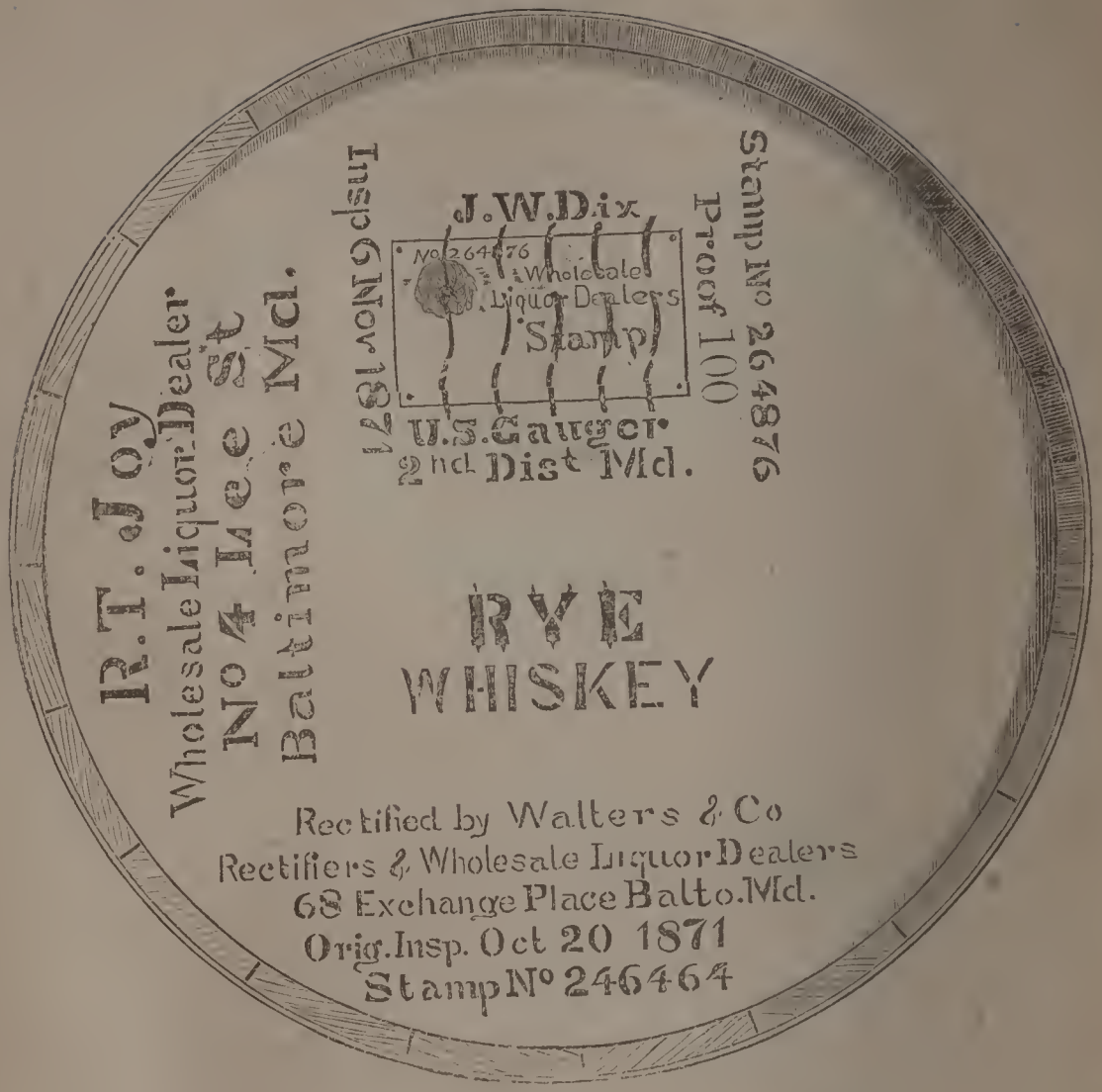


Fig. 11.

Figure 11 represents the marks, &c., to be placed on the head of a package containing rectified spirits, where the contents have been drawn from any other package containing rectified spirits. It will be observed that the cask must bear the name and place of business of the rectifier, time and place of inspection, and the number of stamp on the original package containing said spirits after rectification. (Compare marks, &c., on figure 10. See also Sup. 1, Series 5, No. 7.)

The word "*re-distilled*" may be substituted for "*rectified*," where the former word occurs on the original package.

Serial No. of casks.	No. of stamp.	Wine gallons.	Wantage.	Indication.	Temperature.	Correction to volume.	Wine gallons corrected.	Strength.	Proof gallons.	Taxable gallons.
2707	D. 165,807	44½	½	108	55	0.2. Add.	44	110	48.40	49·
2708	D. 165,808	45	½	117	77	1.0. Sub.	44	110	48.40	49.

From this data the gauger will fill up his warehouse stamps, and after they have been properly signed by the storekeeper and himself, he will paste them on the casks, cancel, tack, and varnish them, and cut on the bung stave the wine and proof gallons.

He will then copy the above on *Form* 59 in triplicate, and deliver two copies of the same to the collector and one to the assessor.

When spirits are to be withdrawn from bond, no re-gauging is to be done, as the distiller is required to pay the tax on the amount entered. After receiving the tax-paid stamps from the collector, the gauger will paste them on, cancel, tack, and varnish them, and cut or burn on the head of each package the marks and brands prescribed in "*Supplement* 1, *Series* 5, *No.* 7, *Internal Revenue Regulations*," (and which are substantially shown in figure 8,) and will then report to collector and assessor on form 59.

In gauging and stamping rectified spirits, &c., the same care in handling the gauging instruments is as essential as at distilleries, as carelessness will often cost the gauger much trouble and expense, and sometimes his commission; while it also occasions great expense, inconvenience and loss of custom to the dealer.

The following directions for marking and branding are taken from Series 5, No. 7.—Supplement No. 1, United States Internal Revenue, and are inserted here for the information of the gaugers and all others interested:

Regulations in relation to the use of stamps for distilled spirits, the issue of stamps for rectified spirits, and to provide for a uniform and correct mode of marking and branding casks or packages of spirits.

TREASURY DEPARTMENT,
OFFICE OF INTERNAL REVENUE, WASHINGTON, *August* 20, 1869.

I.—USE OF STAMPS.

Under the provisions of the act of July 20, 1868, as amended by the act of April 10, 1869, there are, exclusive of the stamp for stock on hand, three classes of stamps for distilled spirits: 1. Those used for distillers, consisting of the distillery-warehouse and the tax-paid stamps. 2. Stamps for rectified spirits, to be used for rectifiers. And 3. Wholesale liquor-dealers' stamps, to be used for wholesale liquor-dealers.

All spirits produced are required to be deposited in the distillery warehouse, prior to which they must be drawn into casks containing not less than twenty wine-gallons each, and gauged, and the distillery-warehouse stamp affixed to each cask. When withdrawn from warehouse the tax-paid stamp must also be affixed, and both of said stamps must remain upon such casks until the spirits therein are emptied or drawn off, when such stamps, with the other marks and brands, must be effaced and destroyed, as required by section 43.

The special brand, however, which, under the provisions of section 25, is to accompany the tax-paid stamp, must not be removed and destroyed, but, when

the cask is emptied, is to be cancelled by cutting or burning a cancelling line across the letters and figures composing such brand in such manner as not to destroy their legibility.

The original packages of a distiller, after removal from warehouse, must therefore bear the distillery-warehouse and tax-paid stamps.

The absence of these stamps from any cask of raw spirits, high wines, or spirits withdrawn from a distillery-warehouse, is evidence that there has been a change of package, and the cask in such case must bear the marks and brands required by section 47, which furnish the means for identifying the spirits after such change of package. So long as the original package remains unchanged, and bears the distillery-warehouse and tax-paid stamps, no other stamp is required.

Under the provisions of section 25, every package of rectified spirits filled for shipment, sale, or delivery on the premises of any authorized rectifier, must be gauged, inspected, marked, and branded as hereinafter provided, and have affixed thereto the stamp for rectified spirits. *It must be understood, however, that the term rectified spirits is here used in its legal, and not in the ordinary commercial signification of the term. Any person who purchases tax-paid spirits and redistils or compounds the same, or who purifies or refines such spirits by any process, is a rectifier as defined by law; and the spirits so redistilled, compounded, refined, or purified, are rectified spirits, and must bear the stamps for rectified spirits. The term rectifier, as used in these regulations, includes every person who treats distilled spirits by any of the processes the using of which would constitute him a rectifier as defined by section* 59 *of the act of July* 20, 1868, *as amended by the act of April* 10, 1869.

When a rectifier purchases spirits, and proposes to subject them to any of the processes which would constitute him a rectifier, he must file with the collector the notice hereinafter provided for; and, upon emptying the casks, he must erase and destroy the stamps, marks, and brands upon such casks, with the exception of the special brand accompanying the tax-paid stamp, which must be cancelled as hereinbefore provided. And when he puts spirits into casks, after completing his process, such casks must have affixed the stamp for rectified spirits, and this stamp must not be removed until the cask is emptied. The absence of this stamp from a cask of rectified spirits is evidence of a change of package, and will justify a seizure if the package is not marked and branded as required by section 47; but so long as the original cask remains unchanged, no other stamp is required.

A wholesale liquor-dealer is defined to be any person who sells or offers for sale spirits in packages of five gallons and upwards; and every cask or package filled for shipment, sale, or delivery, on the premises of any wholesale liquor-dealer, must be gauged and inspected, and have affixed thereto the wholesale liquor-dealers' stamp.

Where a wholesale liquor-dealer or rectifier purchases spirits in the original packages as put up by a distiller or rectifier, properly marked and stamped as such, no regauging or restamping is required. Where, however, he draws spirits from such original packages, and fills other packages on his premises, the spirits must be reganged and the stamp for rectified spirits or a wholesale liquor-dealers' stamp affixed, as the case may be; and if such package contains ten gallons or more, it must also be branded and marked as required by section 47. Where a wholesale liquor-dealer purchases packages of spirits properly marked, stamped, and branded, and sells them in the same condition, no other stamp or mark is required.

A neglect or failure to comply with the requirements of section 25, on the part of a rectifier or wholesale liquor-dealer, renders him liable to the forfeiture of all spirits owned by him or in which he has any interest, and to a penalty of one thousand dollars.

The attention of all officers of internal revenue is specially called to these instructions, as much confusion has arisen in consequence of the indiscriminate use of the stamp for rectified spirits and the wholesale liquor-dealers' stamp. The use of the wholesale liquor-dealers' stamp upon the original packages of rectified spirits put up by a rectifier is improper, and must not be allowed; and the term rectified spirits must not be limited to its old commercial sense, but must be construed to cover all spirits included in the statute definition.

The provisions of section 47 apply to all cases where distilled spirits are drawn from any cask or package, and placed in any other cask or package containing not less than ten gallons, and intended for sale, without regard to the person by whom, or the place where, such change is made; and the absence of such marks or brands is declared to be sufficient cause of forfeiture.

All distilled spirits on hand November 1, 1868, and intended for sale, and not then in bonded warehouse, were required to be returned to the collector, and stamped with the stock-on-hand stamp; and such spirits not so stamped were liable to seizure and forfeiture after December 1, 1868. Where packages of such spirits were properly stamped and marked under the provisions of section 57, no other stamp, mark, or brand is required so long as such package remains unchanged. The absence of any stamp or brand required by law from any package of spirits containing more than five gallons works a forfeiture of the package and contents.

This provision of section 57 is not in conflict with, but in addition to, the requirements of section 25.

If any authorized rectifier fills any package with rectified spirits on his premises for shipment, sale or delivery, without causing the same to be gauged and stamped with the stamp for rectified spirits; or if any wholesale liquor-dealer fills any cask or package of distilled spirits without causing the same to be gauged and stamped with the wholesale liquor-dealers' stamp, he becomes liable to the penalty imposed by section 96, and to the forfeiture of all spirits owned by him or in which he has any interest; and if such packages exceed five gallons, they also become forfeited.

The local officers will be held responsible for the strict enforcement of all the provisions of the law in relation to this subject.

It is known that in some cases the wholesale liquor-dealers' stamp has been erroneously attached where the stamp for rectified spirits should have been used, under the direct instructions or with the assent and permission of the collector of the district; and packages of rectified spirits are now on the market, stamped with the wholesale liquor-dealers' stamp, without the brands and marks required by section 47, and some seizures have been made of such spirits for the want of those brands. It is not proposed that an indiscriminate seizure or detention shall be made of all such spirits for this cause, but that seizure should be confined to cases where there is other evidence of a change of package in cases where the stamps have been attached prior to these instructions. Hereafter, however, the instructions in these regulations will be rigidly enforced, and any wrongful use of stamps will be at the peril of the owner.

Circular No. 76 is revoked, and the foregoing substituted therefor.

ISSUE OF STAMPS FOR RECTIFIED SPIRITS.

Whenever any rectifier proposes to empty any spirits for the purpose of rectifying, purifying, refining, redistilling, or compounding the same, he will file with the collector a notice or statement giving the number of casks or packages, the serial number of each, the number of wine and proof gallons in each, the kind of stamps and serial numbers of each, the particular name of

such spirits as known to the trade, the proof, by whom produced, the district where produced, by whom inspected, and the date of inspection.

This notice will be in the following form:

To ——— ———,

Collector, district of ———.

Notice is hereby given that I will empty, for the purpose of rectification, (redistilling, or compounding, as the case may be,) the following described packages of distilled spirits, to wit ——— barrels, upon which are the following stamps, marks, and brands:

Serial number cask.	Wine gallons.	Proof gallons.	Proof.	Serial number warehouse stamps.	Serial number tax-paid stamps.	Name of spirits.	By whom produced.	District where produced.	Date of original gauge.	By whom gauged.
93	40	54	135	29101	65267	High wines.	Smith & Co.	6th Ohio.	May 1, 1869.	John Smith.

Containing in the aggregate ——— proof gallons.

Dated ——— ———, 18—.

——— ———, *Rectifier*,

No. ——, ——— *street.*

When the process of rectification (including compounding, &c.) has been completed, the rectifier will so notify the collector, giving the number of proof-gallons so rectified, redistilled, or compounded, and request that the spirits may be gauged and inspected and stamps issued for the same; and thereupon the collector will direct a gauger to gauge and inspect the same, and will issue stamps for rectified spirits covering the quantity of spirits, but not in any case to exceed the number of proof gallons stated in the notice of the rectifier as filed in his office. These notices will be preserved and filed by the collector, and a copy thereof furnished to the assessor, who on the first of each month will compare the same with the return of the rectifier.

Collectors will in no instance issue stamps for rectified spirits to any rectifier until this notice is filed with him, and such stamps will be delivered to the gauger, who will attach the same to the barrels or packages.

III.—MARKING AND BRANDING OF CASKS OR PACKAGES OF DISTILLED SPIRITS.

Under the authority vested in the Secretary of the Treasury and the Commissioner of Internal Revenue by the provisions of the act of July 20, 1868, the following regulations are prescribed for the purpose of securing a uniform and correct system of marking and branding packages of spirits:

1. Raw Spirits.

The term "raw spirits" must be understood as including all spirits in the state in which they are produced by the distiller, all of which must be entered in the distillery warehouse, and duly withdrawn therefrom upon the payment of tax, and which should, except in cases where there has been a change of package, bear the distillery warehouse and tax-paid stamps.

When such spirits are drawn from the receiving cisterns, they must be gauged, proved, and marked, and, in addition to affixing the distillery warehouse stamp, the gauger must cut upon the bung-stave, in a legible manner,

the number of wine gallons, the proof, and number of proof gallons of spirits contained in each cask. At the same time, the gauger will cut with a die, or burn upon the head of each cask, its serial number, in figures not less than one inch in length, and the serial number of the distillery warehouse stamp in figures not less than half an inch in length, placing the same immediately under the serial number of the cask, as follows :

No. 194.
D. W. S. No. 47946.

When withdrawn from warehouse, each cask must, in addition to the tax-paid stamp, have cut or burned upon it the name of the distiller, the district, the date of the payment of the tax, the number of proof gallons, and the number of the tax-paid stamp. This brand may, in accordance with the present regulations, be abridged in the following manner :

John Smith & Co.,
Distillers,
6th Dist. O.
T. P. Jan. 10, 1869, P. G. 44.
Stamp 39857.

All of this, except the date, number of proof gallons, and number of the stamp, may be burned upon the cask prior to its being filled at the cisterns, and the date and numbers cut with a die at the time the tax-paid stamp is attached. The letters and figures constituting any brand or mark must in no case be less than half an inch in length. In addition to this, the cask must be conspicuously marked or branded with the particular name of the spirits as known to the trade, as "high wines," "rye," "Bourbon," or "copper distilled" whiskey, as the case may be.

When it becomes necessary to change a package in a distillery warehouse, *i. e.*, to draw off the contents of a cask bearing the distillery warehouse stamp and the accompanying marks and brands, and to place the same in a new cask, the spirits must be again inspected and gauged, the number of wine and proof gallons must be cut upon the bung-stave and upon the head of each cask ; the gauger will cut with a die or burn with a branding iron his name and office, the time and place of inspection, the proof of the spirits, the name of such spirits as known to the trade, the name of the distiller, the distillery where such spirits were produced, and the serial number of the original package, together with the serial number of the warehouse stamp. This brand may be in the following form :

Thomas P. Smith,
U. S. gauger, 1st dist. Pa.
Insp. May 1, 1869, dist. warehouse No. 10.
High wines, proof 140.
Richard Roe, distiller.
Distillery No. 10, 1st Pa.
From cask No. 193.
D. W. S. 40949.

Where such change of package is made after the spirits have been withdrawn from warehouse and the tax-paid stamp attached, the cask will be marked and branded in the same manner, with the addition of the number of proof-gallons, the date of the payment of the tax, and the serial number of the tax-paid stamp This brand may be substantially as follows :

Thomas P. Smith,
U. S. gauger, 1st dist. Penna.
Insp. May 9, 1869.
For Scott & Co., wholesale liquor dealers,
10 Water st., Philada., Pa.
Rye whiskey, proof 101.

John Smith & Co., distillers,
Distillery No. 6, 6th dist., Ohio, P. G. 44.
T. P., May 1, 1869, stamp 39857.
From cask No. 901, D. W. S. 49129.

2. Rectified Spirits.

Under the name rectified spirits are included all spirits which, after leaving the hands of the distiller, are leached through coal, redistilled, refined, compounded, or subjected to any process which would constitute the person using it a rectifier as defined by law.

Spirits subjected to any of these processes must be put up in casks, inspected and gauged, and in addition to attaching the stamp for rectified spirits the gauger will cut upon the bung-stave the number of wine and proof gallons, and mark upon the head of each cask, with a stencil plate, in durable ink, his name and office, the date of inspection, the particular name of such spirits as known to the trade, the proof, the name and place of business of the rectifier, and the serial number of the stamp for rectified spirits affixed thereto. This mark or brand may be substantially as follows:

Thomas P. Smith,
U. S. gauger, 1st dist., Penna.
Insp. May 15, 1869.
Rye whiskey, proof 102.
Greenleaf & Co., rectifiers and wholesale liquor dealers,
10 & 12 South St.,
Philadelphia, Pa.
Stamp No. 64,275.

To which the rectifier may add any known trade-mark adopted and used by him; or, where such trade-mark is the distinctive name of the spirits as known to the trade, it may be used as the name of the spirits.

This brand or mark will be understood to represent that the package is a rectifier's original package, and that the spirits contained therein were rectified, refined, purified, redistilled or compounded, and put up by the party named as a rectifier, and at the place stated in such brand or mark.

When the contents of a cask of rectified spirits are drawn from the original cask or package and placed in another cask or package containing not less than ten gallons, they must be again gauged and inspected, the number of wine and proof gallons cut upon the bung-stave, and upon the head of each cask must be marked or branded the name of the gauger, the time and place of inspection, the proof of the spirits, the particular name of the spirits, as known to the trade, the name and place of business of the rectifier, with the date of the original inspection and the serial number of the stamp for rectified spirits upon the original package. This mark or brand will be substantially as follows:

Amos F. Wright,
U. S. gauger, 2d Dist. Ohio.
Insp. May 20, 1869.
For Smith & Co., wholesale liquor dealers,
Cincinnati, O.
Rye whiskey, proof 102.
Redistilled by
Greenleaf & Co., rectifiers & wholesale liquor dealers,
10 & 12 South St., Philad'a. Pa.
Orig. Insp. May 15, 1869. Stamp No. 64,275.

III.—Wholesale Liquor-Dealers.

Where wholesale liquor-dealers purchase spirits, regularly stamped and bearing the marks and brands required by these regulations, and sell the same

without change, no additional inspection or marking is required. Where, however, they draw from such stamped and branded packages, and fill other packages for shipment, sale, or delivery, the spirits must again be gauged and inspected and the wholesale liquor-dealer's stamp attached, and such packages must be marked with the name of the dealer and the particular name of the spirits as known to the trade. Where the package so filled contains ten gallons or more, it must also be branded or marked as required by section 47, substantially as hereinbefore provided in other cases of change of package.

IV.—Retail Liquor-Dealers.

Retail liquor-dealers are only authorized to sell in quantities less than five gallons, and no reinspection or stamping of the packages of spirits so sold by them is required.

The spirits which they purchase must be in packages properly stamped, marked, or branded, and remain in the original casks or packages until drawn off for sale in retail packages, except where it becomes necessary from leakage or other cause to change the package. Where such change is made, such spirits must be again inspected and gauged, and the new package branded in accordance with the provisions of section 47.

All spirits held by any wholesale or retail liquor-dealer will be held and taken to be "intended for sale."

In all cases where spirits are inspected and gauged, the number of wine and proof gallons must be cut upon the bung-stave.

V.—Forfeited Spirits sold by United States Marshals.

Under the provisions of section fifty-eight, of the act of July 20, 1868, all distilled spirits forfeited to the United States, sold by order of court, whether condemned before or after the passage of the act, are to be sold subject to tax, and the purchaser must immediately and before he takes possession of such spirits pay the tax thereon. And if any tax-paid stamps are affixed to any cask or package so condemned, such stamps must be obliterated and destroyed by the collector or marshal after forfeiture and before such sale.

The spirits so sold are subject to this tax without regard to the question whether or not any tax has been previously paid thereon. The tax to be paid is fifty cents per wine gallon when below proof, and per proof gallon when above proof; fractions of a gallon to be taxed as a gallon. This is substantially a new tax, accruing upon the sale of such spirits by the marshal, and is to be paid in the district where the sale is made, and it is to be collected upon the quantity sold by the marshal.

When, therefore, a sale is made by the marshal, he will require the purchaser, before receiving possession of the spirits, to deliver to him the receipt of the collector of the district in which the sale is made for the tax due upon the same, which receipt will be executed on Form 105. The purchaser, in order to obtain the receipt, will deliver to the collector a statement to be signed by the United States marshal, giving the number of packages, the number of wine and proof gallons in each, with the date of the sale and the name of the purchaser, and the collector will issue for every such cask or package a tax-paid stamp, and cause the same to be affixed thereto. Upon the face of the receipt, Form 105, the collector will endorse the words, "Tax-paid stamps issued," and upon the stamps, "Tax on spirits sold by United States marshal," with the date of the sale

Before the delivery of any spirits so sold to the purchaser, the marshal will mark with a stencil plate, or brand with a branding iron, each cask or package with his name and official title, together with the date and place of sale, and the words tax paid, and the number of proof gallons, with the name of the gauger who gauged the same, and the date of gauging.

No stamp, brand, or mark which may be upon the barrels at the time the

spirits are condemned is to be removed or obliterated, except the tax-paid stamp, and the new tax-paid stamp and mark of the marshal should be so placed as not to cover or deface any of such stamps, marks, or brands.

Collectors will furnish distillers, rectifiers, and wholesale liquor dealers with a copy of these regulations, and all officers of internal revenue will see that the regulations are promptly and strictly carried out; and any neglect or failure to comply with the same, on the part of any officer, will be deemed sufficient cause for his immediate dismissal from office.

C. DELANO, *Commissioner.*

Approved:

WILLIAM A. RICHARDSON,
Acting Secretary of the Treasury.

STAND CASKS, &C.

It frequently happens that gaugers are called upon to gauge extra large casks, &c. We give some of the practical rules now in use:

"Take the dimensions in inches and tenths of inches. Add together the square of the top diameter, the square of the bottom diameter, and four times the square of the midway diameter, (ascertained by adding the top and bottom diameters together, and dividing by two,) and divide the sum by six, which gives the square of the true mean diameter; multiply this by the height of the cistern, and the product will be the capacity in cylindrical inches. As there are 294 cylindrical inches in a gallon, divide this last product by 294, and the quotient is the number of gallons contained in the cistern.

Example.

108 inches, top diameter.
120 inches, bottom diameter.

Divide by 2)228

114 midway diameter.
100 in height.

108×108 =11664
120×120 =14400
114×114×4=51984

78048÷6=13.008
13.008×100÷294=4424 gallons.

Should the cistern be full, or warped so as not to be a perfect circle, or otherwise in such condition that the diameter of the bottom cannot be taken, the following rule, though not mathematically correct, is for all practical purposes sufficiently so, the difference being only shown in large cisterns, where the difference between the top and bottom diameters is considerable.

Take the outside circumference of the cistern half way between the bottom and top, divide this by 3.1416, (or multiply by 7 and divide by 22,) and you have the mean diameter on the outside; deduct from this twice the thickness of the staves, and you have the mean inside diameter. Multiply this sum by the height, and the product by .0034; the product is the capacity of the cistern in gallons.

Example, (dimensions being same as in last example.)—Outside circumference of cistern, 367.5 inches; height, 100 inches; staves, $1\frac{1}{2}$ inch thick.

367.5÷3.1416=117—3 inches=114 inches; 114×114×100=1,299,600×.0034=4,418 gallons. (Series 2, No. 11, U. S. Int. Rev. Reg.)

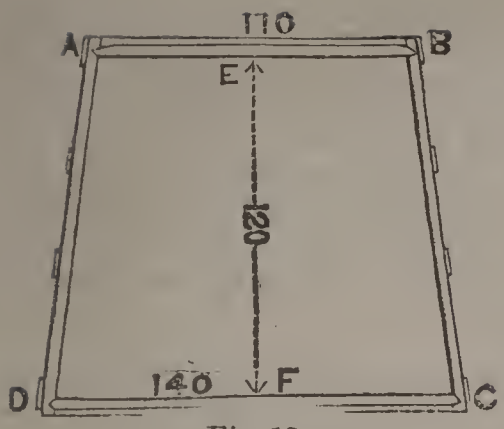


Fig. 12.

Rule.—To three times the rectangle, or, product of the top and bottom diameters, add the sqnare of their difference; multiply the same by one-third of the depth, and divide the product by 294. The quotient will be the capacity in wine gallons.

Example.

Let the figures A, B, C, D represent a tank in the form of the frustum of a cone. The internal top diameter, A, B, is 110 inches, and that of the bottom, C, D, 140 inches, and the depth, E, F, 120 inches. What is the capacity in wine gallons?

140×110—	15400	rectangle.
	3	
	46200	
	900	square of difference.
	47100	
	40	$\frac{1}{3}$ of depth.
	1884000	÷ 294 = 6408 gallons.

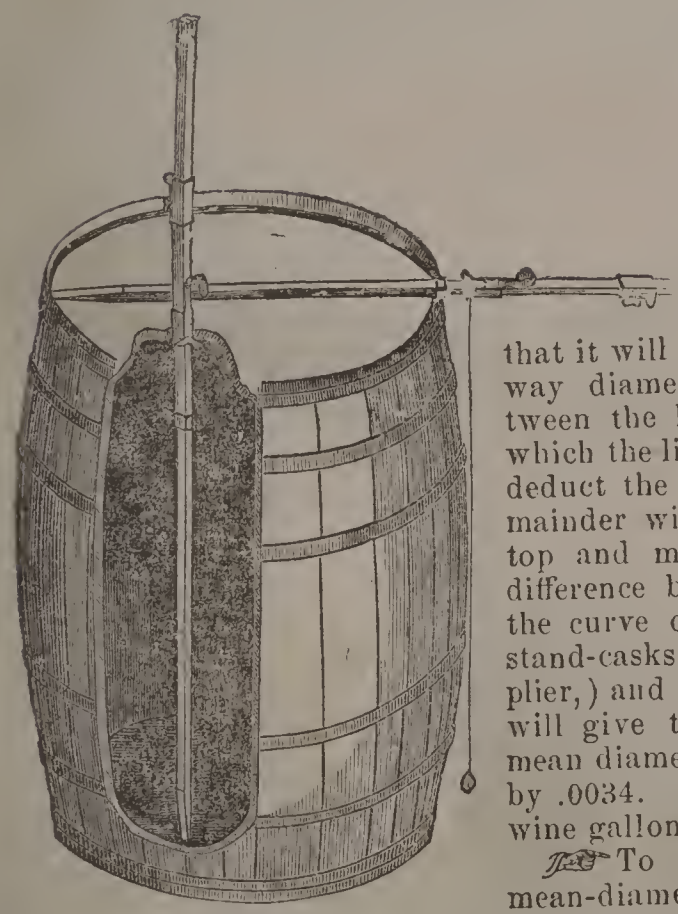


Fig. 13.

Figure 13 represents a stand cask, the midway diameter of which is larger than the top or bottom. Work as follows: Take the length (as shown) inside of heads; then place the rod across the head in such manner as to read the head diameter. While it is in this position drop a plum line from a point on the rod, so that it will touch the cask at its greatest midway diameter. Observe the difference between the head diameter and the point at which the line is set, and from this difference deduct the thickness of the stave. The remainder will be the difference between the top and midway diameter. Multiply this difference by .55, .63 or .70, according to the curve of the stave, (on the majority of stand-casks .70 will be the correct multiplier,) and add the sum to the head, which will give the mean diameter. Square the mean diameter, multiply by length, and then by .0034. The result will be the capacity in wine gallons.*

☞To find the mean-diameter by the mean-diameter slides, place the rod across the cask as shown in figure. Set long slide at head diameter, and suspend the line from lower end of over-slide. Move the

*When the cask is not level, take the circumference at the bilge, multiply by 7 and divide by 22, and deduct twice the thickness of stave.

over-slide down until the thickness of the stave is deducted, and look on B, C, or D for amount to add to the head. Find the latter number on A, and on the adjacent side of rod, opposite said number, will be found the mean-diameter.

☞To find the wantage on such a cask, the surest way is to draw the full size and shape of the cask on the floor. Run the rod into the cask and measure the wet inches. Lay the rod on the diagram, the point resting on the bottom line, mark across at wet inches, and estimate for a tub of same size.

☞To gauge a square vat or tank: Multiply the depth and breadth together, and this result by the length, and divide by 231. The quotient will be the wine gallons.

☞To reduce high wines to proof or any other desired strength, multiply the wine gallons by the given strength, and divide by the required strength.

Example.—To reduce 500 gallons of 125 per cent. to 105 — $500+125=62500 \div 105 = 595\frac{23}{160}$ wine gallons at 105. Amount of water to add, $95\frac{23}{100}$ gallons. This rule is sufficiently correct for all practical purposes.

☞The calipers allow one and a half inches for thickness of the heads. When half-barrels are to be gauged, *add* one-half inch to the length shown by calipers; and in gauging hogsheads *deduct* one-half inch.

☞Keep your instruments clean and bright, and oil the rod daily for the first two or three weeks of its use. Linseed oil is preferable; wipe clean after each application.

☞To conclude. The gauger should remember that to discharge his duties faithfully, he must KNOW NO MAN WHILE AT WORK, but, in all cases, obey orders. Carry out the law to the letter, and keep himself perfectly unbiassed by any individual interests. By doing this he may meet with disfavor from a *few*, but if he proves himself a MAN, he will command the respect and confidence of ALL.

TABLE No. 1.

FOR FINDING THE CAPACITY IN WINE-GALLONS.

The length and mean diameter of a cask or package having been found, opposite the former, on the left-hand margin, and beneath the latter, on the upper margin, will be found the capacity in wine-gallons.

In computing the following table, the rule for the use of decimals, heretofore given, has been followed.

In taking the length of twenty-gallon packages or less, an addition of one-half inch to the caliper measurement should be made. Thus, if the caliper shows 19½ inches, the length should be called 20 inches.

Lengths.	10. MEAN DIAMETERS.									
	10.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
14.0	5	5	5	5	5	5	5½	5½	5½	5½
.1	5	5	5	5	5	5½	5½	5½	5½	6
.2	5	5	5	5	5	5½	5½	5½	5½	6
.3	5	5	5	5	5	5½	5½	5½	5½	6
.4	5	5	5	5	5½	5½	5½	5½	6	6
.5	5	5	5	5	5½	5½	5½	5½	6	6
.6	5	5	5	5	5½	5½	5½	5½	6	6
.7	5	5	5	5½	5½	5½	5½	6	6	6
.8	5	5	5	5½	5½	5½	5½	6	6	6
.9	5	5	5	5½	5½	5½	5½	6	6	6
15.0	5	5	5½	5½	5½	5½	6	6	6	6
.1	5	5	5½	5½	5½	5½	6	6	6	6
.2	5	5	5½	5½	5½	6	6	6	6	6
.3	5	5½	5½	5½	5½	6	6	6	6	6
.4	5	5½	5½	5½	5½	6	6	6	6	6
.5	5	5½	5½	5½	6	6	6	6	6	6
.6	5½	5½	5½	5½	6	6	6	6	6	6½
.7	5½	5½	5½	5½	6	6	6	6	6	6½
.8	5½	5½	5½	6	6	6	6	6	6	6½
.9	5½	5½	5½	6	6	6	6	6	6½	6½
16.0	5½	5½	5½	6	6	6	6	6	6½	6½
.1	5½	5½	6	6	6	6	6	6	6½	6½
.2	5½	5½	6	6	6	6	6	6½	6½	6½
.3	5½	5½	6	6	6	6	6	6½	6½	6½
.4	5½	5½	6	6	6	6	6	6½	6½	6½
.5	5½	6	6	6	6	6	6½	6½	6½	6½
.6	5½	6	6	6	6	6	6½	6½	6½	7
.7	5½	6	6	6	6	6	6½	6½	6½	7
.8	6	6	6	6	6	6½	6½	6½	6½	7
.9	6	6	6	6	6	6½	6½	6½	7	7
17.0	6	6	6	6	6	6½	6½	6½	7	7
.1	6	6	6	6	6	6½	6½	6½	7	7
.2	6	6	6	6	6½	6½	6½	7	7	7
.3	6	6	6	6	6½	6½	6½	7	7	7
.4	6	6	6	6	6½	6½	6½	7	7	7
.5	6	6	6	6½	6½	6½	6½	7	7	7
.6	6	6	6	6½	6½	6½	7	7	7	7
.7	6	6	6	6½	6½	6½	7	7	7	7
.8	6	6	6½	6½	6½	6½	7	7	7	7
.9	6	6	6½	6½	6½	7	7	7	7	7

Lengths.	10. MEAN DIAMETERS.									
	10.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
18.0	6	6	6½	6½	6½	7	7	7	7	7
.1	6	6	6½	6½	6½	7	7	7	7	7½
.2	6	6½	6½	6½	7	7	7	7	7	7½
.3	6	6½	6½	6½	7	7	7	7	7	7½
.4	6	6½	6½	6½	7	7	7	7	7½	7½
.5	6	6½	6½	6½	7	7	7	7	7½	7½
.6	6½	6½	6½	7	7	7	7	7	7½	7½
.7	6½	6½	6½	7	7	7	7	7	7½	7½
.8	6½	6½	6½	7	7	7	7	7½	7½	7½
.9	6½	6½	6½	7	7	7	7	7½	7½	7½
19.0	6½	6½	7	7	7	7	7	7½	7½	7½
.1	6½	6½	7	7	7	7	7½	7½	7½	8
.2	6½	6½	7	7	7	7	7½	7½	7½	8
.3	6½	6½	7	7	7	7	7½	7½	7½	8
.4	6½	7	7	7	7	7	7½	7½	7½	8
.5	6½	7	7	7	7	7½	7½	7½	8	8
.6	6½	7	7	7	7	7½	7½	7½	8	8
.7	7	7	7	7	7	7½	7½	7½	8	8
.8	7	7	7	7	7	7½	7½	8	8	8
.9	7	7	7	7	7½	7½	7½	8	8	8

Lengths.	11. MEAN DIAMETERS.									
	11.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
15.0	6	6	6½	6½	6½	7	7	7	7	7
.1	6	6½	6½	6½	6½	7	7	7	7	7
.2	6	6½	6½	6½	7	7	7	7	7	7½
.3	6½	6½	6½	6½	7	7	7	7	7	7½
.4	6½	6½	6½	6½	7	7	7	7	7	7½
.5	6½	6½	6½	7	7	7	7	7	7½	7½
.6	6½	6½	6½	7	7	7	7	7	7½	7½
.7	6½	6½	6½	7	7	7	7	7½	7½	7½
.8	6½	6½	7	7	7	7	7	7½	7½	7½
.9	6½	6½	7	7	7	7	7	7½	7½	7½
16.0	6½	7	7	7	7	7	7½	7½	7½	8
.1	6½	7	7	7	7	7	7½	7½	7½	8
.2	6½	7	7	7	7	7½	7½	7½	7½	8
.3	6½	7	7	7	7	7½	7½	7½	8	8
.4	7	7	7	7	7	7½	7½	7½	8	8
.5	7	7	7	7	7	7½	7½	7½	8	8
.6	7	7	7	7	7½	7½	7½	8	8	8
.7	7	7	7	7	7½	7½	7½	8	8	8
.8	7	7	7	7½	7½	7½	8	8	8	8
.9	7	7	7	7½	7½	7½	8	8	8	8

Lengths.	11. MEAN DIAMETERS.									
	11.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
17.0	7	7	7	7½	7½	7½	8	8	8	8
.1	7	7	7	7½	7½	7½	8	8	8	8
.2	7	7	7½	7½	7½	8	8	8	8	8
.3	7	7	7½	7½	7½	8	8	8	8	8½
.4	7	7	7½	7½	7½	8	8	8	8	8½
.5	7	7½	7½	7½	8	8	8	8	8	8½
.6	7	7½	7½	7½	8	8	8	8	8½	8½
.7	7	7½	7½	7½	8	8	8	8	8½	8½
.8	7½	7½	7½	8	8	8	8	8	8½	8½
.9	7½	7½	7½	8	8	8	8	8½	8½	8½
18.0	7½	7½	7½	8	8	8	8	8½	8½	8½
.1	7½	7½	8	8	8	8	8	8½	8½	9
.2	7½	7½	8	8	8	8	8½	8½	8½	9
.3	7½	7½	8	8	8	8	8½	8½	8½	9
.4	7½	8	8	8	8	8	8½	8½	9	9
.5	7½	8	8	8	8	8½	8½	8½	9	9
.6	7½	8	8	8	8	8½	8½	8½	9	9
.7	8	8	8	8	8	8½	8½	9	9	9
.8	8	8	8	8	8½	8½	8½	9	9	9
.9	8	8	8	8	8½	8½	8½	9	9	9
19.0	8	8	8	8	8½	8½	9	9	9	9
.1	8	8	8	8½	8½	8½	9	9	9	9
.2	8	8	8	8½	8½	8½	9	9	9	9
.3	8	8	8	8½	8½	8½	9	9	9	9
.4	8	8	8	8½	8½	9	9	9	9	9½
.5	8	8	8½	8½	8½	9	9	9	9	9½
.6	8	8	8½	8½	8½	9	9	9	9	9½
.7	8	8	8½	8½	9	9	9	9	9½	9½
.8	8	8	8½	8½	9	9	9	9	9½	9½
.9	8	8½	8½	8½	9	9	9	9	9½	9½
20.0	8	8½	8½	8½	9	9	9	9½	9½	9½
.1	8	8½	8½	9	9	9	9	9½	9½	9½
.2	8½	8½	8½	9	9	9	9	9½	9½	10
.3	8½	8½	8½	9	9	9	9	9½	9½	10
.4	8½	8½	9	9	9	9	9½	9½	9½	10
.5	8½	8½	9	9	9	9	9½	9½	10	10
.6	8½	8½	9	9	9	9	9½	9½	10	10
.7	8½	8½	9	9	9	9½	9½	9½	10	10
.8	8½	9	9	9	9	9½	9½	9½	10	10
.9	8½	9	9	9	9	9½	9½	10	10	10

Lengths.	12. MEAN DIAMETERS.									
	12.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
16.0	8	8	8	8	8½	8½	8½	9	9	9
.1	8	8	8	8	8½	8½	8½	9	9	9
.2	8	8	8	8½	8½	8½	9	9	9	9
.3	8	8	8	8½	8½	8½	9	9	9	9
.4	8	8	8½	8½	8½	9	9	9	9	9½
.5	8	8	8½	8½	8½	9	9	9	9	9½
.6	8	8	8½	8½	8½	9	9	9	9	9½
.7	8	8½	8½	8½	9	9	9	9	9½	9½
.8	8	8½	8½	8½	9	9	9	9	9½	9½
.9	8	8½	8½	9	9	9	9	9	9½	9½
17.0	8½	8½	8½	9	9	9	9	9½	9½	9½
.1	8½	8½	8½	9	9	9	9	9½	9½	9½
.2	8½	8½	9	9	9	9	9½	9½	9½	10
.3	8½	8½	9	9	9	9	9½	9½	9½	10
.4	8½	8½	9	9	9	9	9½	9½	10	10
.5	8½	9	9	9	9	9½	9½	9½	10	10
.6	8½	9	9	9	9	9½	9½	9½	10	10
.7	8½	9	9	9	9	9½	9½	10	10	10
.8	9	9	9	9	9½	9½	9½	10	10	10
.9	9	9	9	9	9½	9½	9½	10	10	10
18.0	9	9	9	9	9½	9½	10	10	10	10
.1	9	9	9	9½	9½	9½	10	10	10	10
.2	9	9	9	9½	9½	9½	10	10	10	10½
.3	9	9	9	9½	9½	10	10	10	10	10½
.4	9	9	9½	9½	9½	10	10	10	10	10½
.5	9	9	9½	9½	9½	10	10	10	10½	10½
.6	9	9	9½	9½	10	10	10	10	10½	10½
.7	9	9½	9½	9½	10	10	10	10	10½	10½
.8	9	9½	9½	9½	10	10	10	10½	10½	10½
.9	9	9½	9½	10	10	10	10	10½	10½	11
19.0	9½	9½	9½	10	10	10	10	10½	10½	11
.1	9½	9½	9½	10	10	10	10½	10½	10½	11
.2	9½	9½	10	10	10	10	10½	10½	10½	11
.3	9½	9½	10	10	10	10	10½	10½	11	11
.4	9½	9½	10	10	10	10½	10½	10½	11	11
.5	9½	10	10	10	10	10½	10½	11	11	11
.6	9½	10	10	10	10	10½	10½	11	11	11
.7	9½	10	10	10	10½	10½	10½	11	11	11
.8	10	10	10	10	10½	10½	10½	11	11	11
.9	10	10	10	10	10½	10½	11	11	11	11

Lengths.	12. MEAN DIAMETERS.									
	12.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
20.0	10	10	10	10½	10½	10½	11	11	11	11½
.1	10	10	10	10½	10½	11	11	11	11	11½
.2	10	10	10	10½	10½	11	11	11	11	11½
.3	10	10	10	10½	10½	11	11	11	11½	11½
.4	10	10	10½	10½	10½	11	11	11	11½	11½
.5	10	10	10½	10½	11	11	11	11	11½	11½
.6	10	10	10½	10½	11	11	11	11½	11½	11½
.7	10	10½	10½	10½	11	11	11	11½	11½	12
.8	10	10½	10½	11	11	11	11	11½	11½	12
.9	10	10½	10½	11	11	11	11½	11½	11½	12
21.0	10	10½	10½	11	11	11	11½	11½	12	12
.1	10½	10½	10½	11	11	11	11½	11½	12	12
.2	10½	10½	11	11	11	11	11½	11½	12	12
.3	10½	10½	11	11	11	11½	11½	12	12	12
.4	10½	10½	11	11	11	11½	11½	12	12	13
.5	10½	11	11	11	11	11½	11½	12	12	12
.6	10½	11	11	11	11½	11½	11½	12	12	12
.7	10½	11	11	11	11½	11½	12	12	12	12½
.8	10½	11	11	11	11½	11½	12	12	12	12½
.9	11	11	11	11	11½	11½	12	12	12	12½

Lengths.	13. MEAN DIAMETERS.									
	13.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
17.0	10	10	10	10	10½	10½	10½	11	11	11
.1	10	10	10	10	10½	10½	11	11	11	11
.2	10	10	10	10½	10½	10½	11	11	11	11½
.3	10	10	10	10½	10½	11	11	11	11	11½
.4	10	10	10½	10½	10½	11	11	11	11	11½
.5	10	10	10½	10½	10½	11	11	11	11½	11½
.6	10	10½	10½	10½	11	11	11	11	11½	11½
.7	10	10½	10½	10½	11	11	11	11½	11½	11½
.8	10	10½	10½	11	11	11	11	11½	11½	12
.9	10½	10½	10½	11	11	11	11	11½	11½	12
18.0	10½	10½	10½	11	11	11	11½	11½	11½	12
.1	10½	10½	11	11	11	11	11½	11½	12	12
.2	10½	10½	11	11	11	11	11½	11½	12	12
.3	10½	11	11	11	11	11½	11½	11½	12	12
.4	10½	11	11	11	11	11½	11½	12	12	12
.5	10½	11	11	11	11½	11½	11½	12	12	12
.6	11	11	11	11	11½	11½	11½	12	12	12
.7	11	11	11	11	11½	11½	12	12	12	12
.8	11	11	11	11½	11½	11½	12	12	12	12½
.9	11	11	11	11½	11½	12	12	12	12	12½

Lengths.	13. MEAN DIAMETERS.									
	13.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
19.0	11	11	11	11½	11½	12	12	12	12	12½
.1	11	11	11½	11½	11½	12	12	12	12½	12½
.2	11	11	11½	11½	12	12	12	12	12½	12½
.3	11	11	11½	11½	12	12	12	12½	12½	12½
.4	11	11½	11½	11½	12	12	12	12½	12½	13
.5	11	11½	11½	12	12	12	12	12½	12½	13
.6	11	11½	11½	12	12	12	12½	12½	13	13
.7	11½	11½	11½	12	12	12	12½	12½	13	13
.8	11½	11½	12	12	12	12	12½	12½	13	13
.9	11½	11½	12	12	12	12½	12½	12½	13	13
20.0	11½	11½	12	12	12	12½	12½	13	13	13
.1	11½	12	12	12	12	12½	12½	13	13	13
.2	11½	12	12	12	12½	12½	13	13	13	13
.3	12	12	12	12	12½	12½	13	13	13	13½
.4	12	12	12	12	12½	12½	13	13	13	13½
.5	12	12	12	12½	12½	13	13	13	13	13½
.6	12	12	12	12½	12½	13	13	13	13½	13½
.7	12	12	12	12½	12½	13	13	13	13½	13½
.8	12	12	12½	12½	13	13	13	13	13½	13½
.9	12	12	12½	12½	13	13	13	13½	13½	14
21.0	12	12	12½	12½	13	13	13	13½	13½	14
.1	12	12½	12½	12½	13	13	13	13½	13½	14
.2	12	12½	12½	13	13	13	13½	13½	14	14
.3	12	12½	12½	13	13	13	13½	13½	14	14
.4	12½	12½	12½	13	13	13	13½	13½	14	14
.5	12½	12½	13	13	13	13½	13½	14	14	14
.6	12½	12½	13	13	13	13½	13½	14	14	14
.7	12½	12½	13	13	13	13½	13½	14	14	14
.8	12½	13	13	13	13½	13½	14	14	14	14½
.9	12½	13	13	13	13½	13½	14	14	14	14½
22.0	12½	13	13	13	13½	13½	14	14	14	14½
.1	13	13	13	13	13½	13½	14	14	14½	14½
.2	13	13	13	13½	13½	14	14	14	14½	14½
.3	13	13	13	13½	13½	14	14	14	14½	14½
.4	13	13	13	13½	13½	14	14	14	14½	14½
.5	13	13	13½	13½	14	14	14	14½	14½	15
.6	13	13	13½	13½	14	14	14	14½	14½	15
.7	13	13	13½	13½	14	14	14	14½	14½	15
.8	13	13½	13½	14	14	14	14½	14½	15	15
.9	13	13½	13½	14	14	14	14½	14½	15	15

Lengths.	14. MEAN DIAMETERS.									
	14.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
18.0	12	12	12½	12½	12½	13	13	13	13½	13½
.1	12	12	12½	12½	13	13	13	13½	13½	13½
.2	12	12½	12½	12½	13	13	13	13½	13½	13½
.3	12	12½	12½	13	13	13	13½	13½	13½	14
.4	12½	12½	12½	13	13	13	13½	13½	13½	14
.5	12½	12½	12½	13	13	13	13½	13½	14	14
.6	12½	12½	13	13	13	13½	13½	13½	14	14
.7	12½	12½	13	13	13	13½	13½	13½	14	14
.8	12½	12½	13	13	13½	13½	13½	14	14	14½
.9	12½	13	13	13	13½	13½	13½	14	14	14½
19.0	12½	13	13	13	13½	13½	14	14	14	14½
.1	13	13	13	13	13½	13½	14	14	14	14½
.2	13	13	13	13½	13½	13½	14	14	14½	14½
.3	13	13	13	13½	13½	14	14	14	14½	14½
.4	13	13	13½	13½	13½	14	14	14½	14½	14½
.5	13	13	13½	13½	14	14	14	14½	14½	14½
.6	13	13	13½	13½	14	14	14	14½	14½	15
.7	13	13½	13½	13½	14	14	14	14½	14½	15
.8	13	13½	13½	14	14	14	14½	14½	14½	15
.9	13	13½	13½	14	14	14	14½	14½	15	15
20.0	13½	13½	13½	14	14	14½	14½	14½	15	15
.1	13½	13½	14	14	14	14½	14½	14½	15	15
.2	13½	13½	14	14	14	14½	14½	15	15	15
.3	13½	13½	14	14	14½	14½	14½	15	15	15½
.4	13½	14	14	14	14½	14½	15	15	15	15½
.5	13½	14	14	14	14½	14½	15	15	15	15½
.6	14	14	14	14½	14½	14½	15	15	15½	15½
.7	14	14	14	14½	14½	15	15	15	15½	15½
.8	14	14	14½	14½	14½	15	15	15½	15½	15½
.9	14	14	14½	14½	15	15	15	15½	15½	16
21.0	14	14	14½	14½	15	15	15	15½	15½	16
.1	14	14	14½	14½	15	15	15½	15½	15½	16
.2	14	14½	14½	14½	15	15	15½	15½	16	16
.3	14	14½	14½	15	15	15	15½	15½	16	16
.4	14½	14½	14½	15	15	15½	15½	15½	16	16
.5	14½	14½	15	15	15	15½	15½	16	16	16
.6	14½	14½	15	15	15	15½	15½	16	16	16½
.7	14½	14½	15	15	15½	15½	15½	16	16	16½
.8	14½	14½	15	15	15½	15½	16	16	16	16½
.9	14½	15	15	15	15½	15½	16	16	16½	16½

Lengths.	14. MEAN DIAMETERS.									
	14.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
22.0	14½	15	15	15½	15½	15½	16	16	16½	16½
.1	15	15	15	15½	15½	16	16	16	16½	16½
.2	15	15	15	15½	15½	16	16	16½	16½	17
.3	15	15	15½	15½	16	16	16	16½	16½	17
.4	15	15	15½	15½	16	16	16	16½	16½	17
.5	15	15	15½	15½	16	16	16½	16½	16½	17
.6	15	15½	15½	15½	16	16	16½	16½	17	17
.7	15	15½	15½	16	16	16	16½	16½	17	17
.8	15	15½	15½	16	16	16½	16½	17	17	17
.9	15	15½	15½	16	16	16½	16½	17	17	17½
23.0	15½	15½	16	16	16	16½	16½	17	17	17½
.1	15½	15½	16	16	16½	16½	17	17	17	17½
.2	15½	15½	16	16	16½	16½	17	17	17½	17½
.3	15½	16	16	16	16½	16½	17	17	17½	17½
.4	15½	16	16	16½	16½	16½	17	17	17½	17½
.5	15½	16	16	16½	16½	17	17	17	17½	18
.6	15½	16	16	16½	16½	17	17	17½	17½	18
.7	16	16	16	16½	16½	17	17	17½	17½	18
.8	16	16	16½	16½	17	17	17	17½	17½	18
.9	16	16	16½	16½	17	17	17	17½	18	18

Lengths.	15. MEAN DIAMETERS.									
	15.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
19.0	14½	14½	15	15	15½	15½	15½	16	16	16½
.1	14½	15	15	15	15½	15½	16	16	16	16½
.2	14½	15	15	15½	15½	15½	16	16	16½	16½
.3	15	15	15	15½	15½	16	16	16	16½	16½
.4	15	15	15	15½	15½	16	16	16½	16½	16½
.5	15	15	15½	15½	15½	16	16	16½	16½	17
.6	15	15	15½	15½	16	16	16	16½	16½	17
.7	15	15	15½	15½	16	16	16½	16½	16½	17
.8	15	15½	15½	16	16	16	16½	16½	17	17
.9	15	15½	15½	16	16	16	16½	16½	17	17
20.0	15½	15½	15½	16	16	16½	16½	17	17	17
.1	15½	15½	16	16	16	16½	16½	17	17	17½
.2	15½	15½	16	16	16½	16½	16½	17	17	17½
.3	15½	16	16	16	16½	16½	17	17	17	17½
.4	15½	16	16	16	16½	16½	17	17	17½	17½
.5	15½	16	16	16½	16½	17	17	17	17½	17½
.6	16	16	16	16½	16½	17	17	17½	17½	17½
.7	16	16	16	16½	16½	17	17	17½	17½	18
.8	16	16	16½	16½	17	17	17	17½	17½	18
.9	16	16	16½	16½	17	17	17½	17½	18	18

Lengths.	15. MEAN DIAMETERS.									
	15.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
21.0	16	16½	16½	16½	17	17	17½	17½	18	18
.1	16	16½	16½	17	17	17½	17½	17½	18	18
.2	16	16½	16½	17	17	17½	17½	18	18	18
.3	16½	16½	17	17	17	17½	17½	18	18	18½
.4	16½	16½	17	17	17½	17½	17½	18	18	18½
.5	16½	16½	17	17	17½	17½	18	18	18½	18½
.6	16½	16½	17	17	17½	17½	18	18	18½	18½
.7	16½	17	17	17½	17½	18	18	18	18½	18½
.8	16½	17	17	17½	17½	18	18	18½	18½	18½
.9	17	17	17	17½	17½	18	18	18½	18½	19
22.0	17	17	17½	17½	17½	18	18	18½	18½	19
.1	17	17	17½	17½	18	18	18½	18½	19	19
.2	17	17	17½	17½	18	18	18½	18½	19	19
.3	17	17½	17½	18	18	18	18½	18½	19	19
.4	17	17½	17½	18	18	18½	18½	19	19	19½
.5	17	17½	17½	18	18	18½	18½	19	19	19½
.6	17½	17½	18	18	18	18½	18½	19	19	19½
.7	17½	17½	18	18	18½	18½	19	19	19½	19½
.8	17½	17½	18	18	18½	18½	19	19	19½	19½
.9	17½	18	18	18	18½	18½	19	19	19½	19½
23.0	17½	18	18	18½	18½	19	19	19½	19½	20
.1	17½	18	18	18½	18½	19	19	19½	19½	20
.2	17½	18	18	18½	18½	19	19	19½	19½	20
.3	18	18	18½	18½	19	19	19½	19½	20	20
.4	18	18	18½	18½	19	19	19½	19½	20	20
.5	18	18	18½	18½	19	19	19½	19½	20	20
.6	18	18½	18½	19	19	19½	19½	20	20	20½
.7	18	18½	18½	19	19	19½	19½	20	20	20½
.8	18	18½	18½	19	19	19½	19½	20	20	20½
.9	18½	18½	19	19	19½	19½	20	20	20½	20½
24.0	18½	18½	19	19	19½	19½	20	20	20½	20½
.1	18½	18½	19	19	19½	19½	20	20	20½	20½
.2	18½	19	19	19½	19½	20	20	20½	20½	21
.3	18½	19	19	19½	19½	20	20	20½	20½	21
.4	18½	19	19	19½	19½	20	20	20½	20½	21
.5	19	19	19	19½	20	20	20½	20½	21	21
.6	19	19	19½	19½	20	20	20½	20½	21	21
.7	19	19	19½	19½	20	20	20½	20½	21	21
.8	19	19	19½	19½	20	20½	20½	21	21	21½
.9	19	19½	19½	20	20	20½	20½	21	21	21½

Lengths.	16. MEAN DIAMETERS.									
	16.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
20.0	17½	17½	18	18	18½	18½	18½	19	19	19½
.1	17½	17½	18	18	18½	18½	19	19	19½	19½
.2	17½	18	18	18	18½	18½	19	19	19½	19½
.3	18	18	18	18½	18½	19	19	19½	19½	19½
.4	18	18	18	18½	18½	19	19	19½	19½	20
.5	18	18	18½	18½	19	19	19	19½	19½	20
.6	18	18	18½	18½	19	19	19½	19½	20	20
.7	18	18½	18½	18½	19	19	19½	19½	20	20
.8	18	18½	18½	19	19	19½	19½	19½	20	20
.9	18	18½	18½	19	19	19½	19½	20	20	20½
21.0	18½	18½	18½	19	19	19½	19½	20	20	20½
.1	18½	18½	19	19	19½	19½	20	20	20½	20½
.2	18½	18½	19	19	19½	19½	20	20	20½	20½
.3	18½	19	19	19½	19½	19½	20	20	20½	20½
.4	18½	19	19	19½	19½	20	20	20½	20½	21
.5	18½	19	19	19½	19½	20	20	20½	20½	21
.6	19	19	19½	19½	20	20	20	20½	20½	21
.7	19	19	19½	19½	20	20	20½	20½	21	21
.8	19	19	19½	19½	20	20	20½	20½	21	21
.9	19	19½	19½	20	20	20½	20½	21	21	21½
22.0	19	19½	19½	20	20	20½	20½	21	21	21½
.1	19	19½	19½	20	20	20½	20½	21	21	21½
.2	19½	19½	20	20	20½	20½	21	21	21½	21½
.3	19½	19½	20	20	20½	20½	21	21	21½	21½
.4	19½	19½	20	20	20½	20½	21	21	21½	22
.5	19½	20	20	20½	20½	21	21	21½	21½	22
.6	19½	20	20	20½	20½	21	21	21½	21½	22
.7	20	20	20½	20½	21	21	21½	21½	22	22
.8	20	20	20½	20½	21	21	21½	21½	22	22
.9	20	20	20½	20½	21	21	21½	21½	22	22
23.0	20	20½	20½	21	21	21½	21½	22	22	22½
.1	20	20½	20½	21	21	21½	21½	22	22	22½
.2	20	20½	20½	21	21	21½	21½	22	22½	22½
.3	20½	20½	21	21	21½	21½	22	22	22½	22½
.4	20½	20½	21	21	21½	21½	22	22	22½	22½
.5	20½	20½	21	21	21½	22	22	22½	22½	23
.6	20½	21	21	21½	21½	22	22	22½	22½	23
.7	20½	21	21	21½	21½	22	22	22½	22½	23
.8	20½	21	21	21½	22	22	22½	22½	23	23
.9	21	21	21½	21½	22	22	22½	22½	23	23

Lengths.	16 MEAN DIAMETERS.									
	16.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
24.0	21	21	21½	21½	22	22	22½	23	23	23½
.1	21	21½	21½	22	22	22½	22½	23	23	23½
.2	21	21½	21½	22	22	22½	22½	23	23	23½
.3	21	21½	21½	22	22	22½	23	23	23½	23½
.4	21	21½	22	22	22½	22½	23	23	23½	23½
.5	21½	21½	22	22	22½	22½	23	23	23½	24
.6	21½	21½	22	22	22½	23	23	23½	23½	24
.7	21½	22	22	22½	22½	23	23	23½	23½	24
.8	21½	22	22	22½	22½	23	23	23½	24	24
.9	21½	22	22	22½	23	23	23½	23½	24	24
25.0	22	22	22½	22½	23	23	23½	23½	24	24½
.1	22	22	22½	23	23	23	23½	24	24	24½
.2	22	22	22½	23	23	23½	23½	24	24	24½
.3	22	22½	22½	23	23	23½	23½	24	24½	24½
.4	22	22½	22½	23	23	23½	24	24	24½	24½
.5	22	22½	23	23	23½	23½	24	24	24½	25
.6	22½	22½	23	23	23½	23½	24	24½	24½	25
.7	22½	22½	23	23	23½	24	24	24½	24½	25
.8	22½	22½	23	23½	23½	24	24	24½	25	25
.9	22½	23	23	23½	23½	24	24½	24½	25	25

Lengths.	17 MEAN DIAMETERS.									
	17.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
20.01	19½	20	20	20½	20½	21	21	21½	21½	22
.1	20	20	20	20½	20½	21	21	21½	21½	22
.2	20	20	20½	20½	21	21	21½	21½	22	22
.3	20	20	20½	20½	21	21	21½	21½	22	22
.4	20	20½	20½	21	21	21	21½	21½	22	22
.5	20	20½	20½	21	21	21½	21½	22	22	22½
.6	20	20½	20½	21	21	21½	21½	22	22	22½
.7	20½	20½	21	21	21½	21½	22	22	22½	22½
.8	20½	20½	21	21	21½	21½	22	22	22½	22½
.9	20½	21	21	21½	21½	22	22	22½	22½	23
21.0	20½	21	21	21½	21½	22	22	22½	22½	23
.1	20½	21	21	21½	21½	22	22	22½	22½	23
.2	21	21	21½	21½	22	22	22½	22½	23	23
.3	21	21	21½	21½	22	22	22½	22½	23	23
.4	21	21½	21½	22	22	22½	22½	23	23	23½
.5	21	21½	21½	22	22	22½	22½	23	23	23½
.6	21	21½	21½	22	22	22½	22½	23	23½	23½
.7	21½	21½	22	22	22½	22½	23	23	23½	23½
.8	21½	21½	22	22	22½	22½	23	23	23½	23½
.9	21½	22	22	22½	22½	23	23	23½	23½	24

Lengths.	17. MEAN DIAMETERS.									
	17.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
22.0	21½	22	22	22½	22½	23	23	23½	23½	24
.1	21½	22	22	22½	23	23	23½	23½	24	24
.2	22	22	22½	22½	23	23	23½	23½	24	24
.3	22	22	22½	22½	23	23	23½	24	24	24½
.4	22	22½	22½	23	23	23½	23½	24	24	24½
.5	22	22½	22½	23	23	23½	23½	24	24	24½
.6	22	22½	22½	23	23½	23½	24	24	24½	24½
.7	22½	22½	23	23	23½	23½	24	24	24½	24½
.8	22½	22½	23	23	23½	23½	24	24½	24½	25
.9	22½	23	23	23½	23½	24	24	24½	24½	25
23.0	22½	23	23	23½	23½	24	24	24½	25	25
.1	22½	23	23	23½	24	24	24½	24½	25	25
.2	23	23	23½	23½	24	24	24½	24½	25	25½
.3	23	23	23½	23½	24	24½	24½	25	25	25½
.4	23	23½	23½	24	24	24½	24½	25	25	25½
.5	33	23½	23½	24	24	24½	25	25	25½	25½
.6	23	23½	23½	24	24½	24½	25	25	25½	25½
.7	23½	23½	24	24	24½	24½	25	25½	25½	26
.8	23½	23½	24	24	24½	25	25	25½	25½	26
.9	23½	24	24	24½	24½	25	25	25½	26	26
24.0	23½	24	24	24½	24½	25	25½	25½	26	26
.1	23½	24	24	24½	25	25	25½	25½	26	26½
.2	24	24	24½	24½	25	25	25½	26	26	26½
.3	24	24	24½	24½	25	25½	25½	26	26	26½
.4	24	24½	24½	25	25	25½	25½	26	26½	26½
.5	24	24½	24½	25	25	25½	26	26	26½	26½
.6	24	24½	24½	25	25½	25½	26	26	26½	27
.7	24½	24½	25	25	25½	25½	26	26½	26½	27
.8	24½	24½	25	25	25½	26	26	26½	26½	27
.9	24½	25	25	25½	25½	26	26	26½	27	27
25.0	24½	25	25	25½	25½	26	26½	26½	27	27
.1	24½	25	25	25½	26	26	26½	26½	27	27½
.2	25	25	25½	25½	26	26	26½	27	27	27½
.3	25	25	25½	25½	26	26½	26½	27	27½	27½
.4	25	25½	25½	26	26	26½	27	27	27½	27½
.5	25	25½	25½	26	26½	26½	27	27	27½	28
.6	25	25½	25½	26	26½	26½	27	27½	27½	28
.7	25½	25½	26	26	26½	27	27	27½	27½	28
.8	25½	25½	26	26½	26½	27	27	27½	28	28
.9	25½	26	26	26½	26½	27	27½	27½	28	28

Lengths.	17. MEAN DIAMETERS.									
	17.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
25.0	25½	26	26	26½	27	27	27½	27½	28	28½
.1	25½	26	26½	26½	27	27	27½	28	28	28½
.2	25½	26	26½	26½	27	27½	27½	28	28	28½
.3	26	26	26½	27	27	27½	27½	28	28½	28½
.4	26	26	26½	27	27	27½	28	28	28½	29
.5	26	26½	26½	27	27½	27½	28	28	28½	29
.6	26	26½	27	27	27½	27½	28	28½	28½	29
.7	26	26½	27	27	27½	28	28	28½	29	29
.8	26½	26½	27	27½	27½	28	28	28½	29	29
.9	26½	26½	27	27½	27½	28	28½	28½	29	29½
27.0	26½	27	27	27½	28	28	28½	29	29	29½
.1	26½	27	27½	27½	28	28	28½	29	29	29½
.2	26½	27	27½	27½	28	28½	28½	29	29½	29½
.3	27	27	27½	28	28	28½	29	29	29½	29½
.4	27	27	27½	28	28	28½	29	29	29½	30
.5	27	27½	27½	28	28½	28½	29	29½	29½	30
.6	27	27½	28	28	28½	28½	29	29½	29½	30
.7	27	27½	28	28	28½	29	29	29½	30	30
.8	27½	27½	28	28½	28½	29	29½	29½	30	30½
.9	27½	27½	28	28½	28½	29	29½	29½	30	30½
28.0	27½	28	28	28½	29	29	29½	30	30	30½
.1	27½	28	28½	28½	29	29½	29½	30	30½	30½
.2	27½	28	28½	28½	29	29½	29½	30	30½	30½
.3	28	28	28½	29	29	29½	30	30	30½	31
.4	28	28	28½	29	29	29½	30	30½	30½	31
.5	28	28½	28½	29	29½	29½	30	30½	30½	31
.6	28	28½	29	29	29½	30	30	30½	31	31
.7	28	28½	29	29	29½	30	30	30½	31	31½
.8	28½	28½	29	29½	29½	30	30½	30½	31	31½
.9	28½	28½	29	29½	30	30	30½	31	31	31½
29.0	28½	29	29	29½	30	30	30½	31	31	31½
.1	28½	29	29½	29½	30	30½	30½	31	31½	31½
.2	28½	29	29½	29½	30	30½	31	31	31½	32
.3	29	29	29½	30	30	30½	31	31	31½	32
.4	29	29	29½	30	30½	30½	31	31½	31½	32
.5	29	29½	29½	30	30½	30½	31	31½	32	32
.6	29	29½	30	30	30½	31	31	31½	32	32
.7	29	29½	30	30	30½	31	31½	31½	32	32½
.8	29½	29½	30	30½	30½	31	31½	31½	32	32½
.9	29½	29½	30	30½	31	31	31½	31½	32	32½

Lengths.	17. MEAN DIAMETERS.									
	17.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
30.0	29½	30	30	30½	31	31	31½	32	32½	32½
.1	29½	30	30½	30½	31	31½	31½	32	32½	33
.2	29½	30	30½	30½	31	31½	32	32	32½	33
.3	30	30	30½	31	31	31½	32	32½	32½	33
.4	30	30	30½	31	31½	31½	32	32½	32½	33
.5	30	30½	30½	31	31½	32	32	32½	33	33
.6	30	30½	31	31	31½	32	32	32½	33	33½
.7	30	30½	31	31	31½	32	32½	32½	33	33½
.8	30½	30½	31	31½	31½	32	32½	33	33	33½
.9	30½	30½	31	31½	32	32	32½	33	33½	33½
31.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.9	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Lengths.	18. MEAN DIAMETERS.									
	18.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
21.0	23	23½	23½	24	24	24½	24½	25	25	25½
.1	23½	23½	24	24	24½	24½	25	25	25½	25½
.2	23½	23½	24	24	24½	24½	25	25	25½	25½
.3	23½	23½	24	24½	24½	25	25	25½	25½	26
.4	23½	24	24	24½	24½	25	25	25½	25½	26
.5	23½	24	24	24½	25	25	25½	25½	26	26
.6	24	24	24½	24½	25	25	25½	25½	26	26
.7	24	24	24½	24½	25	25½	25½	26	26	26½
.8	24	24½	24½	25	25	25½	25½	26	26	26½
.9	24	24½	24½	25	25	25½	26	26	26½	26½
22.0	24	24½	25	25	25½	25½	26	26	26½	26½
.1	24½	24½	25	25	25½	25½	26	26½	26½	27
.2	24½	24½	25	25½	25½	26	26	26½	26½	27
.3	24½	25	25	25½	25½	26	26	26½	27	27
.4	24½	25	25	25½	26	26	26½	26½	27	27
.5	25	25	25½	25½	26	26	26½	27	27	27½
.6	25	25	25½	25½	26	26½	26½	27	27	27½
.7	25	25½	25½	26	26	26½	26½	27	27½	27½
.8	25	25½	25½	26	26	26½	27	27	27½	27½
.9	25	25½	26	26	26½	26½	27	27	27½	28

Lengths.	18. MEAN DIAMETERS.									
	18.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
23.0	25½	25½	26	26	26½	27	27	27½	27½	28
.1	25½	25½	26	26½	26½	27	27	27½	28	28
.2	25½	26	26	26½	26½	27	27½	27½	28	28
.3	25½	26	26½	26½	27	27	27½	27½	28	28½
.4	26	26	26½	26½	27	27	27½	28	28	28½
.5	26	26	26½	27	27	27½	27½	28	28½	28½
.6	26	26½	26½	27	27	27½	28	28	28½	28½
.7	26	26½	26½	27	27½	27½	28	28	28½	29
.8	26	26½	27	27	27½	27½	28	28½	28½	29
.9	26½	26½	27	27	27½	28	28	28½	28½	29
24.0	26½	26½	27	27½	27½	28	28	28½	29	29
.1	26½	27	27	27½	28	28	28½	28½	29	29½
.2	26½	27	27½	27½	28	28	28½	29	29	29½
.3	27	27	27½	27½	28	28½	28½	29	29	29½
.4	27	27	27½	28	28	28½	28½	29	29½	29½
.5	27	27½	27½	28	28	28½	29	29	29½	30
.6	27	27½	27½	28	28½	28½	29	29	29½	30
.7	27	27½	28	28	28½	29	29	29½	29½	30
.8	27½	27½	28	28	28½	29	29	29½	30	30
.9	27½	27½	28	28½	28½	29	29½	29½	30	30½
25.0	27½	28	28	28½	29	29	29½	29½	30	30½
.1	27½	28	28½	28½	29	29	29½	30	30	30½
.2	28	28	28½	28½	29	29½	29½	30	30½	30½
.3	28	28	28½	29	29	29½	30	30	30½	30½
.4	28	28½	28½	29	29	29½	30	30	30½	31
.5	28	28½	28½	29	29½	29½	30	30½	30½	31
.6	28	28½	29	29	29½	30	30	30½	31	31
.7	28½	28½	29	29½	29½	30	30	30½	31	31
.8	28½	28½	29	29½	29½	30	30½	30½	31	31½
.9	28½	29	29	29½	30	30	30½	31	31	31½
26.0	28½	29	29½	29½	30	30½	30½	31	31	31½
.1	29	29	29½	29½	30	30½	30½	31	31½	31½
.2	29	29	29½	30	30	30½	31	31	31½	32
.3	29	29½	29½	30	30½	30½	31	31½	31½	32
.4	29	29½	29½	30	30½	30½	31	31½	31½	32
.5	29	29½	30	30	30½	31	31	31½	32	32
.6	29½	29½	30	30½	30½	31	31½	31½	32	32½
.7	29½	30	30	30½	30½	31	31½	32	32	32½
.8	29½	30	30	30½	31	31	31½	32	32	32½
.9	29½	30	30½	30½	31	31½	31½	32	32½	32½

Lengths.	18. MEAN DIAMETERS.									
	18.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
27.0	29½	30	30½	30½	31	31½	32	32	32½	33
.1	30	30	30½	31	31	31½	32	32	32½	33
.2	30	30½	30½	31	31½	31½	32	32½	32½	33
.3	30	30½	31	31	31½	32	32	32½	33	33
.4	30	30½	31	31	31½	32	32	32½	33	33¼
.5	30½	30½	31	31½	31½	32	32½	32½	33	33½
.6	30½	30½	31	31½	32	32	32½	33	33	33½
.7	30½	31	31	31½	32	32	32½	33	33½	33½
.8	30½	31	31½	31½	32	32½	32½	33	33½	34
.9	30½	31	31½	32	32	32½	33	33	33½	34
28.0	31	31	31½	32	32	32½	33	33½	33½	34
.1	31	31½	31½	32	32½	32½	33	33½	34	34
.2	31	31½	32	32	32½	33	33	34	34	34
.3	31	31½	32	32	32½	33	33½	34	34	34½
.4	31½	31½	32	32½	32½	33	33½	34	34	34½
.5	31½	32	32	32½	33	33	33½	34	34½	34½
.6	31½	32	32	32½	33	33½	33½	34	34½	34½
.7	31½	32	32½	32½	33	33½	34	34	34½	35
.8	31½	32	32½	33	33	33½	34	34	34½	35
.9	32	32	32½	33	33½	33½	34	34½	35	35
29.0	32	32½	32½	33	33½	33½	34	34½	35	35
.1	32	32½	33	33	33½	34	34	34½	35	35½
.2	32	32½	33	33	33½	34	34½	34½	35	35½
.3	32½	32½	33	33½	33½	34	34½	35	35	35½
.4	32½	32½	33	33½	34	34	34½	35	35½	35½
.5	32½	33	33	33½	34	34½	34½	35	35½	36
.6	32½	33	33½	33½	34	34½	35	35	35½	36
.7	32½	33	33½	34	34	34½	35	35½	35½	36
.8	33	33	33½	34	34½	34½	35	35½	36	36
.9	33	33½	33½	34	34½	35	35	35½	36	36½
30.0	33	33½	34	34	34½	35	35½	35½	36	36½
.1	33	33½	34	34½	34½	35	35½	36	36	36½
.2	33½	33½	34	34½	35	35	35½	36	36½	36½
.3	33½	34	34	34½	35	35½	35½	36	36½	37
.4	33½	34	34	34½	35	35½	36	36	36½	37
.5	33½	34	34½	34½	35	35½	36	36½	36½	37
.6	33½	34	34½	35	35	35½	36	36½	37	37
.7	34	34	34½	35	35½	35½	36	36½	37	37
.8	34	34½	34½	35	35½	36	36	36½	37	37½
.9	34	34½	35	35	35½	36	36½	37	37	37½

Lengths.	18. MEAN DIAMETERS.									
	18.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
31.0	34	34½	35	35½	35½	36	36½	37	37½	37½
.1	34½	34½	35	35½	36	36	36½	37	37½	38
.2	34½	35	35	35½	36	36½	36½	37	37½	38
.3	34½	35	35½	35½	36	36½	37	37	37½	38
.4	34½	35	35½	36	36	36½	37	37½	37½	38
.5	34½	35	35½	36	36½	36½	37	37½	38	38½
.6	35	35	35½	36	36½	37	37	37½	38	38½
.7	35	35½	35½	36	36½	37	37½	37½	38	38½
.8	35	35½	36	36	36½	37	37½	38	38	38½
.9	35	35½	36	36½	36½	37	37½	38	38½	39
32.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.9	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Lengths.	19. MEAN DIAMETERS.									
	19.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
22.0	27	27½	27½	28	28	28½	28½	29	29½	29½
.1	27	27½	27½	28	28½	28½	29	29	29½	30
.2	27	27½	28	28	28½	28½	29	29½	29½	30
.3	27½	27½	28	28½	28½	29	29	29½	30	30
.4	27½	28	28	28½	28½	29	29½	29½	30	30
.5	27½	28	28	28½	29	29	29½	29½	30	30½
.6	27½	28	28½	28½	29	29	29½	30	30	30½
.7	28	28	28½	29	29	29½	29½	30	30½	30½
.8	28	28½	28½	29	29	29½	30	30	30½	30½
.9	28	28½	28½	29	29½	29½	30	30	30½	31
23.0	28	28½	29	29	29½	29½	30	30½	30½	31
.1	28½	28½	29	29½	29½	30	30	30½	31	31
.2	28½	29	29	29½	29½	30	30½	30½	31	31
.3	28½	29	29	29½	30	30	30½	31	31	31½
.4	28½	29	29½	29½	30	30½	30½	31	31	31½
.5	29	29	29½	30	30	30½	30½	31	31½	31½
.6	29	29½	29½	30	30	30½	31	31	31½	32
.7	29	29½	29½	30	30½	30½	31	31½	31½	32
.8	29	29½	30	30	30½	31	31	31½	31½	32
.9	29½	29½	30	30½	30½	31	31	31½	32	32

Lengths.	19. MEAN DIAMETERS.									
	19.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
24.0	29½	30	30	30½	30½	31	31½	31½	32	32½
.1	29½	30	30	30½	31	31	31½	32	32	32½
.2	29½	30	30½	30½	31	31½	31½	32	32½	32½
.3	30	30	30½	31	31	31½	32	32	32½	33
.4	30	30½	30½	31	31	31½	32	32	32½	33
.5	30	30½	30½	31	31½	31½	32	32½	32½	33
.6	30	30½	31	31	31½	32	32	32½	33	33
.7	30½	30½	31	31½	31½	32	32½	32½	33	33½
.8	30½	31	31	31½	31½	32	32½	32½	33	33½
.9	30½	31	31	31½	32	32	32½	33	33	33½
25.0	30½	31	31½	31½	32	32½	32½	33	33½	33½
.1	31	31	31½	32	32	32½	33	33	33½	34
.2	31	31½	31½	32	32	32½	33	33½	33½	34
.3	31	31½	31½	32	32½	32½	33	33½	34	34
.4	31	31½	32	32	32½	33	33	33½	34	34
.5	31½	31½	32	32½	32½	33	33½	33½	34	34½
.6	31½	32	32	32½	33	33	33½	34	34	34½
.7	31½	32	32	32½	33	33½	33½	34	34½	34½
.8	31½	32	32½	32½	33	33½	33½	34	34½	34½
.9	32	32	32½	33	33	33½	34	34	34½	35
26.0	32	32	32½	33	33½	33½	34	34½	34½	35
.1	32	32½	32½	33	33½	34	34	34½	35	35
.2	32	32½	33	33	33½	34	34	34½	35	35½
.3	32½	32½	33	33½	33½	34	34½	34½	35	35½
.4	32½	32½	33	33½	34	34	34½	35	35	35½
.5	32½	33	33	33½	34	34½	34½	35	35½	35½
.6	32½	33	33½	33½	34	34½	34½	35	35½	36
.7	33	33	33½	34	34	34½	35	35½	35½	36
.8	33	33	33½	34	34½	34½	35	35½	35½	36
.9	33	33½	33½	34	34½	35	35	35½	36	36½
27.0	33	33½	34	34	34½	35	35½	35½	36	36½
.1	33½	33½	34	34½	34½	35	35½	36	36	36½
.2	33½	33½	34	34½	35	35	35½	36	36½	36½
.3	33½	34	34	34½	35	35½	35½	36	36½	37
.4	33½	34	34½	34½	35	35½	36	36	36½	37
.5	34	34	34½	35	35	35½	36	36½	36½	37
.6	34	34	34½	35	35½	35½	36	36½	37	37
.7	34	34½	34½	35	35½	36	36	36½	37	37½
.8	34	34½	35	35	35½	36	36½	36½	37	37½
.9	34½	34½	35	35½	35½	36	36½	37	37	37½

Lengths.	19. MEAN DIAMETERS.									
	19.0	.1	.2	.3	.4	.5	.6	.7	8.	.9
28.0	34½	34½	35	35½	36	36	36½	37	37½	37½
.1	34½	35	35	35½	36	36½	36½	37	37½	38
.2	34½	35	35½	35½	36	36½	37	37	37½	38
.3	35	35	35½	36	36	36½	37	37½	38	38
.4	35	35	35½	36	36½	36½	37	37½	38	38
.5	35	35½	35½	36	36½	37	37½	37½	38	38½
.6	35	35½	36	36	36½	37	37½	37½	38	38½
.7	35	35½	36	36½	37	37	37½	38	38½	38½
.8	35½	35½	36	36½	37	37	37½	38	38½	39
.9	35½	36	36	36½	37	37½	38	38	38½	39
29.0	35½	36	36½	36½	37	37½	38	38½	38½	39
.1	35½	36	36½	37	37½	37½	38	38½	39	39
.2	36	36	36½	37	37½	38	38	38½	39	39½
.3	36	36½	36½	37	37½	38	38½	38½	39	39½
.4	36	36½	37	37	37½	38	38½	39	39	39½
.5	36	36½	37	37½	38	38	38½	39	39½	40
.6	36½	36½	37	37½	38	38½	38½	39	39½	40
.7	36½	37	37½	37½	38	38½	39	39	39½	40
.8	36½	37	37½	37½	38	38½	39	39½	39½	40
.9	36½	37	37½	38	38½	38½	39	39½	40	40½
30.0	37	37	37½	38	38½	39	39	39½	40	40½
.1	37	37½	38	38	38½	39	39½	39½	40	40½
.2	37	37½	38	38	38½	39	39½	40	40½	40½
.3	37	37½	38	38½	39	39	39½	40	40½	41
.4	37½	37½	38	38½	39	39½	39½	40	40½	41
.5	37½	38	38½	38½	39	39½	40	40½	40½	41
.6	37½	38	38½	39	39	39½	40	40½	41	41
.7	37½	38	38½	39	39½	39½	40	40½	41	41½
.8	38	38	38½	39	39½	40	40	40½	41	41½
.9	38	38½	39	39	39½	40	40½	41	41	41½
31.0	38	38½	39	39	39½	40	40½	41	41½	41½
.1	38	38½	39	39½	40	40	40½	41	41½	42
.2	38½	38½	39	39½	40	40½	41	41	41½	42
.3	38½	39	39½	39½	40	40½	41	41½	42	42
.4	38½	39	39½	40	40	40½	41	41½	42	42½
.5	38½	39	39½	40	40½	41	41	41½	42	42½
.6	39	39	39½	40	40½	41	41½	41½	42	42½
.7	39	39½	40	40	40½	41	41½	42	42½	42½
.8	39	39½	40	40½	40½	41	41½	42	42½	43
.9	39	39½	40	40½	41	41½	41½	42	42½	43

Lengths.	19. MEAN DIAMETERS.									
	19.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
32.0	39½	39½	40	40½	41	41½	42	42	42½	43
.1	39½	40	40½	40½	41	41½	42	42½	43	43½
.2	39½	40	40½	41	41	41½	42	42½	43	43½
.3	39½	40	40½	41	41½	42	42	42½	43	43½
.4	40	40	40½	41	41½	42	42½	43	43	43½
.5	40	40½	41	41	41½	42	42½	43	43½	44
.6	40	40½	41	41½	41½	42	42½	43	43½	44
.7	40	40½	41	41½	42	42½	42½	43	43½	44
.8	40½	40½	41	41½	42	42½	43	43½	43½	44
.9	40½	41	41	41½	42	42½	43	43½	44	44½

Lengths.	20. MEAN DIAMETERS.									
	20.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
23.0	31½	31½	32	32	32½	33	33	33½	34	34
.1	31½	32	32	32½	32½	33	33½	34	34	34½
.2	31½	32	32	32½	33	33	33½	34	34	34½
.3	31½	32	32½	32½	33	33½	33½	34	34½	34½
.4	32	32	32½	33	33	33½	34	34	34½	35
.5	32	32½	32½	33	33½	33½	34	34½	34½	35
.6	32	32½	32½	33	33½	33½	34	34½	34½	35
.7	32½	32½	33	33	33½	34	34	34½	35	35
.8	32½	32½	33	33½	33½	34	34½	34½	35	35½
.9	32½	33	33	33½	34	34	34½	35	35	35½
24.0	32½	33	33½	33½	34	34½	34½	35	35½	35½
.1	33	33	33½	34	34	34½	35	35	35½	36
.2	33	33	33½	34	34	34½	35	35½	35½	36
.3	33	33½	34	34	34½	35	35	35½	36	36
.4	33	33½	34	34	34½	35	35	35½	36	36
.5	33½	33½	34	34½	34½	35	35½	35½	36	36½
.6	33½	34	34	34½	35	35	35½	36	36	36½
.7	33½	34	34½	34½	35	35½	35½	36	36½	36½
.8	33½	34	34½	34½	35	35½	36	36	36½	37
.9	34	34	34½	35	35½	35½	36	36½	36½	37

Lengths.	20. MEAN DIAMETERS.									
	20.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
25.0	34	34½	34½	35	35½	35½	36	36½	37	37
.1	34	34½	35	35	35½	36	36½	36½	37	37½
.2	34½	34½	35	35½	35½	36	36½	36½	37	37½
.3	34½	35	35	35½	36	36	36½	37	37½	37½
.4	34½	35	35	35½	36	36½	36½	37	37½	37½
.5	34½	35	35½	36	36	36½	37	37	37½	38
.6	35	35	35½	36	36	36½	37	37½	37½	38
.7	35	35½	35½	36	36½	37	37	37½	38	38
.8	35	35½	36	36	36½	37	37	37½	38	38½
.9	35½	35½	36	36½	36½	37	37½	38	38	38½
26.0	35½	35½	36	36½	37	37	37½	38	38	38½
.1	35½	36	36	36½	37	37½	37½	38	38½	39
.2	35½	36	36½	36½	37	37½	38	38	38½	39
.3	36	36	36½	37	37½	37½	38	38½	38½	39
.4	36	36½	36½	37	37½	37½	38	38½	39	39
.5	36	36½	37	37	37½	38	38½	38½	39	39½
.6	36	36½	37	37½	37½	38	38½	39	39	39½
.7	36½	36½	37	37½	38	38	38½	39	39½	39½
.8	36½	37	37	37½	38	38½	38½	39	39½	40
.9	36½	37	37½	37½	38	38½	39	39	39½	40
27.0	36½	37	37½	38	38	38½	39	39½	39½	40
.1	37	37½	37½	38	38½	39	39	39½	40	40½
.2	37	37½	37½	38	38½	39	39	39½	40	40½
.3	37	37½	38	38½	38½	39	39½	40	40	40½
.4	37½	37½	38	38½	39	39	39½	40	40½	40½
.5	37½	38	38	38½	39	39½	39½	40	40½	41
.6	37½	38	38½	38½	39	39½	40	40	40½	41
.7	37½	38	38½	39	39	39½	40	40½	41	41
.8	38	38	38½	39	39½	39½	40	40½	41	41½
.9	38	38½	38½	39	39½	40	40½	40½	41	41½
28.0	38	38½	39	39	39½	40	40½	40½	41	41½
.1	38½	38½	39	39½	40	40	40½	41	41½	42
.2	38½	38½	39	39½	40	40½	40½	41	41½	42
.3	38½	39	39½	39½	40	40½	41	41½	41½	42
.4	38½	39	39½	40	40	40½	41	41½	42	42
.5	39	39	39½	40	40½	41	41	41½	42	42½
.6	39	39½	39½	40	40½	41	41½	41½	42	42½
.7	39	39½	40	40½	40½	41	41½	42	42½	42½
.8	39	39½	40	40½	41	41	41½	42	42½	43
.9	39½	39½	40	40½	41	41½	41½	42	42½	43

Lengths.	20. MEAN DIAMETERS.									
	20.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
29.0	39½	40	40	40½	41	41½	42	42	42½	43
.1	39½	40	40½	41	41	41½	42	42½	43	43½
.2	39½	40	40½	41	41½	41½	42	42½	43	43½
.3	40	40½	40½	41	41½	42	42½	42½	43	43½
.4	40	40½	41	41	41½	42	42½	43	43	43½
.5	40	40½	41	41½	42	42	42½	43	43½	44
.6	40½	40½	41	41½	42	42½	42½	43	43½	44
.7	40½	41	41	41½	42	42½	43	43½	43½	44
.8	40½	41	41½	42	42	42½	43	43½	44	44½
.9	40½	41	41½	42	42½	43	43	43½	44	44½
30.0	41	41	41½	42	42½	43	43½	43½	44	44½
.1	41	41½	42	42	42½	43	43½	44	44½	45
.2	41	41½	42	42½	42½	43	43½	44	44½	45
.3	41	41½	42	42½	43	43½	43½	44	44½	45
.4	41½	42	42	42½	43	43½	44	44½	44½	45
.5	41½	42	42½	43	43	43½	44	44½	45	45½
.6	41½	42	42½	43	43½	43½	44	44½	45	45½
.7	42	42	42½	43	43½	44	44½	45	45	45½
.8	42	42½	42½	43	43½	44	44½	45	45½	45½
.9	42	42½	43	43½	44	44	44½	45	45½	46
31.0	42	42½	43	43½	44	44½	44½	45	45½	46
.1	42½	43	43	43½	44	44½	45	45½	46	46
.2	42½	43	43½	43½	44	44½	45	45½	46	46½
.3	42½	43	43½	44	44½	45	45	45½	46	46½
.4	42½	43	43½	44	44½	45	45½	45½	46	46½
.5	43	43½	43½	44	44½	45	45½	46	46½	47
.6	43	43½	44	44½	44½	45	45½	46	46½	47
.7	43	43½	44	44½	45	45½	46	46	46½	47
.8	43	43½	44	44½	45	45½	46	46½	47	47
.9	43½	44	44½	44½	45	45½	46	46½	47	47½
32.0	43½	44	44½	45	45½	45½	46	46½	47	47½
.1	44	44	44½	45	45½	46	46½	47	47½	47½
.2	44	44	44½	45	45½	46	46½	47	47½	48
.3	44	44½	45	45½	45½	46	46½	47	47½	48
.4	44	44½	45	45½	46	46½	46½	47	47½	48
.5	44	44½	45	45½	46	46½	47	47½	48	48½
.6	44½	45	45	45½	46	46½	47	47½	48	48½
.7	44½	45	45½	46	46½	47	47	47½	48	48½
.8	44½	45	45½	46	46½	47	47½	48	48	48½
.9	45	45	45½	46	46½	47	47½	48	48½	49

Lengths.	20. MEAN DIAMETERS.									
	20.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
33.0	45	45½	46	46	46½	47	47½	48	48½	49
.1	45	45½	46	46½	47	47½	48	48½	48½	49
.2	45	45½	46	46½	47	47½	48	48½	49	49½
.3	45½	46	46	46½	47	47½	48	48½	49	49½
.4	45½	46	46½	47	47½	47½	48	48½	49	49½
.5	45½	46	46½	47	47½	48	48½	49	49½	50
.6	45½	46	46½	47	47½	48	48½	49	49½	50
.7	46	46½	47	47½	47½	48	48½	49	49½	50
.8	46	46½	47	47½	48	48½	49	49	49½	50
.9	46	46½	47	47½	48	48½	49	49½	50	50½

Lengths.	21. MEAN DIAMETERS.									
	21.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
24.0	36	36½	36½	37	37½	37½	38	38½	39	39
.1	36	36½	37	37	37½	38	38½	38½	39	39½
.2	36½	36½	37	37½	37½	38	38½	38½	39	39½
.3	36½	37	37	37½	38	38	38½	39	39½	39½
.4	36½	37	37½	37½	38	38½	38½	39	39½	40
.5	37	37	37½	38	38	38½	39	39½	39½	40
.6	37	37	37½	38	38½	38½	39	39½	39½	40
.7	37	37½	38	38	38½	39	39	39½	40	40½
.8	37	37½	38	38½	38½	39	39½	39½	40	40½
.9	37½	37½	38	38½	39	39	39½	40	40½	40½
25.0	37½	38	38	38½	39	39½	39½	40	40½	41
.1	37½	38	38½	39	39	39½	40	40	40½	41
.2	38	38	38½	39	39	39½	40	40½	40½	41
.3	38	38½	38½	39	39½	40	40	40½	41	41½
.4	38	38½	39	39	39½	40	40½	40½	41	41½
.5	38½	38½	39	39½	40	40	40½	41	41½	41½
.6	38½	39	39	39½	40	40	40½	41	41½	41½
.7	38½	39	39½	39½	40	40½	41	41	41½	42
.8	38½	39	39½	40	40	40½	41	41½	41½	42
.9	39	39½	39½	40	40½	41	41	41½	42	42½
26.0	39	39½	39½	40	40½	41	41	41½	42	42½
.1	39	39½	40	40½	40½	41	41½	42	42	42½
.2	39½	39½	40	40½	41	41	41½	42	42½	42½
.3	39½	40	40	40½	41	41½	42	42	42½	43
.4	39½	40	40½	40½	41	41½	42	42½	42½	43
.5	40	40	40½	41	41½	41½	42	42½	43	43½
.6	40	40½	40½	41	41½	42	42	42½	43	43½
.7	40	40½	41	41	41½	42	42½	43	43	43½
.8	40	40½	41	41½	41½	42	42½	43	43½	43½
.9	40½	41	41	41½	42	42½	42½	43	43½	44

Lengths.	21. MEAN DIAMETERS.									
	21.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
27.0	40½	41	41½	41½	42	42½	43	43	43½	44
.1	41	41	41½	42	42	42½	43	43½	44	44
.2	41	41	41½	42	42½	42½	43	43½	44	44½
.3	41	41½	42	42	42½	43	43½	44	44	44½
.4	41	41½	42	42½	42½	43	43½	44	44½	44½
.5	41½	41½	42	42½	43	43½	43½	44	44½	45
.6	41½	42	42	42½	43	43½	44	44	44½	45
.7	41½	42	42½	43	43	43½	44	44½	45	45
.8	41½	42	42½	43	43½	43½	44	44½	45	45½
.9	42	42½	42½	43	43½	44	44½	44½	45	45½
28.0	42	42½	43	43	43½	44	44½	45	45	45½
.1	42	42½	43	43½	44	44	44½	45	45½	46
.2	42½	42½	43	43½	44	44½	44½	45	45½	46
.3	42½	43	43½	43½	44	44½	45	45½	46	46
.4	42½	43	43½	44	44	44½	45	45½	46	46½
.5	43	43	43½	44	44½	45	45½	45½	46	46½
.6	43	43½	43½	44	44½	45	45½	46	46	46½
.7	43	43½	44	44½	44½	45	45½	46	46½	47
.8	43	43½	44	44½	45	45½	45½	46	46½	47
.9	43½	44	44	44½	45	45½	46	46½	46½	47
29.0	43½	44	44½	44½	45	45½	46	46½	47	47½
.1	43½	44	44½	45	45½	46	46	46½	47	47½
.2	44	44	44½	45	45½	46	46½	46½	47	47½
.3	44	44½	45	45½	45½	46	46½	47	47½	48
.4	44	44½	45	45½	46	46	46½	47	47½	48
.5	44½	44½	45	45½	46	46½	47	47½	47½	48
.6	44½	45	45	45½	46	46½	47	47½	48	48½
.7	44½	45	45½	46	46½	46½	47	47½	48	48½
.8	44½	45	45½	46	46½	47	47½	47½	48	48½
.9	45	45½	45½	46	46½	47	47½	48	48½	49
30.0	45	45½	46	46½	46½	47	47½	48	48½	49
.1	45	45½	46	46½	47	47½	48	48	48½	49
.2	45½	45½	46	46½	47	47½	48	48½	49	49
.3	45½	46	46½	47	47	47½	48	48½	49	49½
.4	45½	46	46½	47	47½	48	48	48½	49	49½
.5	46	46	46½	47	47½	48	48½	49	49½	50
.6	46	46½	47	47	47½	48	48½	49	49½	50
.7	46	46½	47	47½	48	48½	48½	49	49½	50
.8	46	46½	47	47½	48	48½	49	49½	50	50
.9	46½	47	47½	47½	48	48½	49	49½	50	50½

Lengths.	21. MEAN DIAMETERS.									
	21.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
31.0	46½	47	47½	48	48½	49	49	49½	50	50½
.1	46½	47	47½	48	48½	49	49½	50	50	51
.2	47	47	48	48	48½	49	49½	50	50½	51
.3	47	47½	48	48	49	49	49½	50	50½	51
.4	47	47½	48	48½	49	49½	50	50½	51	51
.5	47	47½	48	48½	49	49½	50	50½	51	51½
.6	47½	48	48½	49	49	50	50	50½	51	51½
.7	47½	48	48½	49	49½	50	50	51	51	51½
.8	48	48	48½	49	49½	50	50½	51	51½	52
.9	48	48	49	49	49½	50	50½	51	51½	52
32.0	48	48½	49	49½	50	50½	51	51	52	52
.1	48	48½	49	49½	50	50½	51	51½	52	52½
.2	48½	49	49	50	50	50½	51	51½	52	52½
.3	48½	49	49½	50	50	51	51	52	52	52½
.4	48½	49	49½	50	50½	51	51½	52	52½	53
.5	49	49	49½	50	50½	51	51½	52	52½	53
.6	49	49½	50	50½	51	51	52	52	53	53
.7	49	49½	50	50½	51	51½	52	52½	53	53½
.8	49	49½	50	50½	51	51½	52	52½	53	53½
.9	49½	50	50	51	51	52	52	52½	53	53½
33.0	49½	50	50½	51	51½	52	52½	53	53½	54
.1	49½	50	50½	51	51½	52	52½	53	53½	54
.2	50	50½	51	51	52	52	53	53	53½	54
.3	50	50½	51	51½	52	52½	53	53½	54	54½
.4	50	50½	51	51½	52	52½	53	53½	54	54½
.5	50	51	51	51½	52	52½	53	53½	54	54½
.6	50½	51	51½	52	52½	53	53½	54	54½	55
.7	50½	51	51½	52	52½	53	53½	54	54½	55
.8	51	51	51½	52	52½	53	53½	54	54½	55
.9	51	51½	52	52	53	53	54	54	55	55
34.0	51	51½	52	52½	53	53½	54	54½	55	55½
.1	51	51½	52	52½	53	53½	54	54½	55	55½
.2	51½	52	52½	53	53½	54	54½	55	55½	56
.3	51½	52	52½	53	53½	54	54½	55	55½	56
.4	51½	52	52½	53	53½	54	54½	55	55½	56
.5	52	52	53	53	54	54	55	55	56	56
.6	52	52½	53	53½	54	54½	55	55½	56	56½
.7	52	52½	53	53½	54	54½	55	55½	56	56½
.8	52	53	53	54	54	55	55	56	56	57
.9	52½	53	53½	54	54½	55	55½	56	56½	57

Lengths.	21. MEAN DIAMETERS.									
	21.0	.1	.2	.3	.4	.5	.6	.7	.8	.9

Lengths.	22. MEAN DIAMETERS.									
	22.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
25.0	41	41½	42	42½	42½	43	43½	44	44	44½
.1	41½	41½	42	42½	43	43	43½	44	44½	45
.2	41½	42	42	42½	43	43½	44	44	44½	45
.3	41½	42	42½	43	43	43½	44	44½	45	45
.4	42	42	42½	43	43½	44	44	44½	45	45½
.5	42	42½	43	43	43½	44	44	44½	45	45½
.6	42	42½	43	43½	44	44	44½	45	45	45½
.7	42	42½	43	43½	44	44	44½	45	45½	46
.8	42½	43	43	43½	44	44½	45	45	45½	46
.9	42½	43	43½	44	44	44½	45	45½	46	46
26.0	43	43	43½	44	44½	45	45	45½	46	46½
.1	43	43½	44	44	44½	45	45½	46	46	46½
.2	43	43½	44	44½	45	45	45½	46	46½	47
.3	43	43½	44	44½	45	45	45½	46	46½	47
.4	43½	44	44	44½	45	45½	46	46½	47	47
.5	43½	44	44½	45	45	45½	46	46½	47	47
.6	44	44	44½	45	45½	46	46	46½	47	47½
.7	44	44½	45	45	45½	46	46½	47	47	47½
.8	44	44½	45	45½	46	46	46½	47	47½	48
.9	44	44½	45	45½	46	46	47	47	47½	48
27.0	44½	45	45	46	46	46½	47	47½	48	48
.1	44½	45	45½	46	46	46½	47	47½	48	48
.2	45	45	45½	46	46½	47	47	48	48	48½
.3	45	45½	46	46	46½	47	47½	48	48	48½
.4	45	45½	46	46½	47	47	47½	48	48½	49
.5	45	45½	46	46½	47	47½	48	48	48½	49
.6	45½	46	46	47	47	47½	48	48½	49	49
.7	45½	46	46½	47	47	47½	48	48½	49	49½
.8	46	46	46½	47	47½	48	48	49	49	49½
.9	46	46½	47	47	47½	48	48½	49	49	50

Lengths.	22. MEAN DIAMETERS.									
	22.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
28.0	46	46½	47	47½	48	48	48½	49	49½	50
.1	46	46½	47	47½	48	48½	49	49	49½	50
.2	46½	47	47½	48	48	48½	49	49½	50	50½
.3	46½	47	47½	48	48	49	49	49½	50	50½
.4	47	47	47½	48	48½	49	49½	50	50	50½
.5	47	47½	48	48	48½	49	49½	50	50½	51
.6	47	47½	48	48½	49	49	50	50	50½	51
.7	47	47½	48	48½	49	49½	50	50	51	51
.8	47½	48	48½	49	49	49½	50	50½	51	51½
.9	47½	48	48½	49	49	50	50	50½	51	51½
29.0	48	48	48½	49	49½	50	50½	51	51½	52
.1	48	48½	49	49	49½	50	50½	51	51½	52
.2	48	48½	49	49½	50	50½	51	51	51½	52
.3	48	48½	49	49½	50	50½	51	51½	52	52
.4	48½	49	49½	50	50	50½	51	51½	52	52½
.5	48½	49	49½	50	50½	51	51	51½	52	52½
.6	49	49	49½	50	50½	51	51½	52	52½	53
.7	49	49½	50	50	50½	51	51½	52	52½	53
.8	49	49½	50	50½	51	51½	52	52	53	53
.9	49	49½	50	50½	51	51½	52	52½	53	53½
30.0	49½	50	50½	51	51	51½	52	52½	53	53½
.1	49½	50	50½	51	51½	52	52	53	53	53½
.2	50	50	50½	51	51½	52	52½	53	53½	54
.3	50	50	51	51	51½	52	52½	53	53½	54
.4	50	50½	51	51½	52	52½	53	53½	54	54
.5	50	50½	51	51½	52	52½	53	53½	54	54½
.6	50½	51	51½	52	52	53	53	53½	54	54½
.7	50½	51	51½	52	52½	53	53½	54	54	55
.8	51	51	51½	52	52½	53	53½	54	54½	55
.9	51	51½	52	52	53	53	53½	54	54½	55
31.0	51	51½	52	52½	53	53½	54	54½	55	55½
.1	51	51½	52	52½	53	53½	54	54½	55	55½
.2	51½	52	52½	53	53	53½	54	55	55	55½
.3	51½	52	52½	53	53½	53½	54½	55	55½	56
.4	52	52	52½	53	53½	54	54½	55	55½	56
.5	52	52½	53	53	54	54	55	55	55½	56
.6	52	52½	53	53½	54	54½	55	55½	56	56½
.7	52	52½	53	53½	54	54½	55	55½	56	56½
.8	52½	53	53½	54	54½	55	55	56	56	57
.9	52½	53	53½	54	54½	55	55½	56	56½	57

Lengths.	22. MEAN DIAMETERS.									
	22.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
32.0	55	53	53½	54	54½	55	55½	56	56½	57
.1	53	53½	54	54	55	55	56	56	57	57
.2	53	53½	54	54½	55	55½	56	56½	57	57½
.3	53	53½	54	54½	55	55½	56	56½	57	57½
.4	53½	54	54½	55	55½	56	56½	57	57½	58
.5	53½	54	54½	55	55½	56	56½	57	57½	58
.6	53½	54	54½	55	55½	56	56½	57	57½	58
.7	54	54	55	55	56	56	57	57	58	58½
.8	54	54½	55	55½	56	56½	57	57½	58	58½
.9	54	54½	55	55½	56	56½	57	57½	58	58½
33.0	54½	55	55½	56	56½	57	57½	58	58½	59
.1	54½	55	55½	56	56½	57	57½	58	58½	59
.2	54½	55	55½	56	56½	57	58	58	59	59
.3	55	55	56	56½	57	57½	58	58½	59	59½
.4	55	55½	56	56½	57	57½	58	58½	59	59½
.5	55	55½	56	56½	57	57½	58	58½	59	60
.6	55½	56	56½	57	57½	58	58½	59	59½	60
.7	55½	56	56½	57	57½	58	58½	59	59½	60
.8	55½	56	56½	57	58	58	59	59	60	60½
.9	56	56	57	57½	58	58½	59	59½	60	60½
34.0	56	56½	57	57½	58	58½	59	59½	60	60½
.1	56	56½	57	57½	58	58½	59	60	60	61
.2	56½	57	57½	58	58½	59	59½	60	60½	61
.3	56½	57	57½	58	58½	59	59½	60	60½	61
.4	56½	57	57½	58	59	59	60	60½	61	61½
.5	57	57	58	58½	59	59½	60	60½	61	61½
.6	57	57½	58	58½	59	59½	60	60½	61	62
.7	57	57½	58	58½	59	60	60	61	61½	62
.8	57½	58	58½	59	59½	60	60½	61	61½	62
.9	57½	58	58½	59	59½	60	60½	61	61½	62
35.0	57½	58	58½	59	60	60	61	61½	62	62½
.1	58	58	59	59½	60	60½	61	61½	62	62½
.2	58	58½	59	59½	60	60½	61	62	62	63
.3	58	58½	59	59½	60	61	61½	62	62½	63
.4	58½	59	59½	60	60½	61	61½	62	62½	63
.5	58½	59	59½	60	60½	61	61½	62	63	63
.6	58½	59	60	60	61	61½	62	62½	63	63½
.7	59	59	60	60½	61	61½	62	62½	63	63½
.8	59	59½	60	60½	61	61½	62	63	63½	64
.9	59	59½	60	60½	61	62	62½	63	63½	64

Lengths.	22. MEAN DIAMETERS.									
	22.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Lengths.	23. MEAN DIAMETERS.									
	23.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
26.0.....	47	47	47½	48	48½	49	49	50	50	50½
.1.....	47	47½	48	48	48½	49	49½	50	50	50½
.2.....	47	47½	48	48½	49	49	49½	50	50½	51
.3.....	47½	48	48	48½	49	49½	50	50	50½	51
.4.....	47½	48	48½	49	49	49½	50	50½	51	51½
.5.....	47½	48	48½	49	49½	50	50	50½	51	51½
.6.....	48	48½	49	49	49½	50	50½	51	51	52
.7.....	48	48½	49	49	50	50	50½	51	51½	52
.8.....	48	48½	49	49½	50	50½	51	51	51½	52
.9.....	48½	49	49	49½	50	50½	51	51½	52	52
27.0.....	48½	49	49½	50	50½	51	51	51½	52	52½
.1.....	49	49	49½	50	50½	51	51½	52	52	52½
.2.....	49	49½	50	50	50½	51	51½	52	52½	53
.3.....	49	49½	50	50½	51	51	51½	52	52½	53
.4.....	49½	50	50	50½	51	51½	52	52½	53	53
.5.....	49½	50	50½	51	51	51½	52	52½	53	53½
.6.....	49½	50	50½	51	51½	52	52½	53	53	53½
.7.....	50	50	50½	51	51½	52	52½	53	53½	54
.8.....	50	50½	51	51½	52	52	52½	53	53½	54
.9.....	50	50½	51	51½	52	52½	53	53	54	54
28.0.....	50½	51	51	52	52	52½	53	53½	54	54½
.1.....	50½	51	51½	52	52½	53	53	53½	54	54½
.2.....	51	51	51½	52	52½	53	53½	54	54½	55
.3.....	51	51½	52	52	52½	53	53½	54	54½	55
.4.....	51	51½	52	52½	53	53½	54	54	55	55
.5.....	51	52	52	52½	53	53½	54	54½	55	55½
.6.....	51½	52	52½	53	53	54	54	54½	55	55½
.7.....	51½	52	52½	53	53½	54	54½	55	55	56
.8.....	52	52½	53	53	53½	54	54½	55	55½	56
.9.....	52	52½	53	53½	54	54	55	55	55½	56

Lengths.	23. MEAN DIAMETERS.									
	23.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
29.0	52	52½	53	53½	54	54½	55	55½	56	56½
.1	52½	53	53	54	54	54½	55	55½	56	56½
.2	52½	53	53½	54	54½	55	55½	56	56	57
.3	52½	53	53½	54	54½	55	55½	56	56½	57
.4	53	53½	54	54½	55	55	56	56	56½	57
.5	53	53½	54	54½	55	55½	56	56½	57	57
.6	53	54	54	54½	55	55½	56	56½	57	57½
.7	53½	54	54½	55	55	56	56	57	57	57½
.8	53½	54	54½	55	55½	56	56½	57	57½	58
.9	54	54	55	55	55½	56	56½	57	57½	58
30.0	54	54½	55	55½	56	56½	57	57½	58	58½
.1	54	54½	55	55½	56	56½	57	57½	58	58½
.2	54½	55	55½	56	56	57	57	58	58	59
.3	54½	55	55½	56	56½	57	57½	58	58½	59
.4	55	55	55½	56	56½	57	57½	58	58½	59
.5	55	55½	56	56	57	57	58	58	59	59
.6	55	55½	56	56½	57	57½	58	58½	59	59½
.7	55	55½	56	56½	57	57½	58	58½	59	59½
.8	55½	56	56½	57	57½	58	58½	59	59½	60
.9	55½	56	56½	57	57½	58	58½	59	59½	60
31.0	56	56	57	57	58	58	59	59	60	60
.1	56	56½	57	57½	58	58½	59	59½	60	60½
.2	56	56½	57	57½	58	58½	59	59½	60	60½
.3	56	57	57	58	58	59	59	60	60	61
.4	56½	57	57½	58	58½	59	59½	60	60½	61
.5	56½	57	57½	58	58½	59	59½	60	60½	61
.6	57	57½	58	58½	59	59½	60	60½	61	61½
.7	57	57½	58	58½	59	59½	60	60½	61	61½
.8	57	58	58	59	59	60	60	61	61	62
.9	57½	58	58½	59	59½	60	60½	61	61½	62
32.0	57½	58	58½	59	59½	60	60½	61	61½	62
.1	58	58	59	59	60	60	61	61½	62	62½
.2	58	58½	59	59½	60	60½	61	61½	62	62½
.3	58	58½	59	59½	60	60½	61	61½	62	63
.4	58½	59	59½	60	60½	61	61½	62	62½	63
.5	58½	59	59½	60	60½	61	61½	62	62½	63
.6	58½	59	60	60	61	61	62	62½	63	63½
.7	59	59	60	60½	61	61½	62	62½	63	63½
.8	59	59½	60	60½	61	61½	62	62½	63	64
.9	59	59½	60	61	61	62	62½	63	63½	64

Lengths.	23. MEAN DIAMETERS.									
	23.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
33.0	59½	60	60½	61	61½	62	62½	63	63½	64
.1	59½	60	60½	61	61½	62	62½	63	64	64
.2	60	60	61	61½	62	62½	63	63½	64	64½
.3	60	60½	61	61½	62	62½	63	63½	64	64½
.4	60	60½	61	62	62	63	63	64	64½	65
.5	60	61	61½	62	62½	63	63½	64	64½	65
.6	60½	61	61½	62	62½	63	63½	64	65	65½
.7	60½	61	61½	62	63	63	64	64½	65	65½
.8	61	61½	62	62½	63	63½	64	64½	65	65½
.9	61	61½	62	62½	63	63½	64	65	65	66
34.0	61	62	62	63	63½	64	64½	65	65½	66
.1	61½	62	62½	63	63½	64	64½	65	65½	66
.2	61½	62	62½	63	64	64	65	65½	66	66½
.3	61½	62	63	63½	64	64½	65	65½	66	66½
.4	62	62½	63	63½	64	64½	65	66	66½	67
.5	62	62½	63	63½	64½	65	65½	66	66½	67
.6	62	63	63½	64	64½	65	65½	66	66½	67
.7	62½	63	63½	64	64½	65	66	66	67	67½
.8	62½	63	64	64	65	65½	66	66½	67	67½
.9	63	63½	64	64½	65	65½	66	66½	67	68
35.0	63	63½	64	64½	65	66	66½	67	67½	68
.1	63	63½	64	65	65½	66	66½	67	67½	68
.2	63½	64	64½	65	65½	66	67	67	68	68½
.3	63½	64	64½	65	66	66	67	67½	68	68½
.4	64	64	65	65½	66	66½	67	67½	68	69
.5	64	64½	65	65½	66	66½	67	68	68½	69
.6	64	64½	65	66	66½	67	67½	68	68½	69
.7	64	65	65½	66	66½	67	67½	68	69	69½
.8	64½	65	65½	66	66½	67	68	68½	69	69½
.9	64½	65	65½	66	67	67½	68	68½	69	70
36.0	65	65½	66	66½	67	67½	68	69	69½	70
.1	65	65½	66	66½	67	68	68½	69	69½	70
.2	65	66	66	67	67½	68	68½	69	70	70½
.3	65	66	66½	67	67½	68	69	69½	70	70½
.4	65½	66	66½	67	68	68½	69	69½	70	71
5	65½	66	67	67½	68	68½	69	70	70	71
.6	66	66½	67	67½	68	69	69½	70	70½	71
.7	66	66½	67	68	68½	69	69½	70	70½	71
.8	66	67	67½	68	68½	69	70	70½	71	71½
.9	66½	67	67½	68	68½	69	70	70½	71	71½

Lengths.	23. MEAN DIAMETERS.									
	23.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Lengths.	24. MEAN DIAMETERS.									
	24.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
27.0.....	53	53½	54	54	55	55	55½	56	56½	57
.1.....	53	53½	54	54½	55	55½	56	56	56½	57
.2.....	53½	54	54	54½	55	55½	56	56½	57	57½
.3.....	53½	54	54½	55	55	56	56	56½	57	57½
.4.....	54	54	54½	55	55½	56	56½	57	57½	58
.5.....	54	54½	55	55	55½	56	56½	57	57½	58
.6.....	54	54½	55	55½	56	56½	57	57	58	58
.7.....	54	54½	55	55½	56	56½	57	57½	58	58½
.8.....	54½	55	55½	56	56½	57	57	57½	58	58½
.9.....	54½	55	55½	56	56½	57	57½	58	58½	59
28.0.....	55	55½	56	56	57	57	57½	58	58½	59
.1.....	55	55½	56	56½	57	57½	58	58	59	59
.2.....	55	56	56	56½	57	57½	58	58½	59	59½
.3.....	55½	56	56½	57	57	58	58	59	59	59½
.4.....	55½	56	56½	57	57½	58	58½	59	59½	60
.5.....	56	56	57	57	57½	58	58½	59	59½	60
.6.....	56	56½	57	57½	58	58½	59	59½	60	60½
.7.....	56	56½	57	57½	58	58½	59	59½	60	60½
.8.....	56½	57	57½	58	58½	59	59½	60	60	61
.9.....	56½	57	57½	58	58½	59	59½	60	60½	61
29.0.....	57	57½	58	58	59	59	60	60	60½	61
.1.....	57	57½	58	58½	59	59½	60	60½	61	61½
.2.....	57	58	58	58½	59	59½	60	60½	61	61½
.3.....	57½	58	58½	59	59½	60	60	61	61	62
.4.....	57½	58	58½	59	59½	60	60½	61	61½	62
.5.....	58	58	59	59	59½	60	60½	61	61½	62
.6.....	58	58½	59	59½	60	60½	61	61½	62	62½
.7.....	58	58½	59	59½	60	60½	61	61½	62	62½
.8.....	58½	59	59½	60	60½	61	61½	62	62½	63
.9.....	58½	59	59½	60	60½	61	61½	62	62½	63

Lengths.	24. MEAN DIAMETERS.									
	24.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
30.0	59	59	60	60	61	61	62	62	63	63
.1	59	59½	60	60½	61	61½	62	62½	63	63½
.2	59	59½	60	60½	61	61½	62	62½	63	63½
.3	59½	60	60½	61	61½	62	62½	63	63½	64
.4	59½	60	60½	61	61½	62	62½	63	63½	64
.5	60	60	61	61	62	62	63	63	64	64
.6	60	60½	61	61½	62	62½	63	63½	64	64½
.7	60	60½	61	61½	62	62½	63½	63½	64	65
.8	60½	61	61½	62	62½	63	63½	64	64½	65
.9	60½	61	61½	62	62½	63	63½	64	64½	65
31.0	61	61	62	62	63	63½	64	64½	65	65½
.1	61	61½	62	62½	63	63½	64	64½	65	65½
.2	61	61½	62	62½	63	64	64	65	65	66
.3	61	62	62½	63	63½	64	64½	65	65½	66
.4	61½	62	62½	63	63½	64	64½	65	65½	66
.5	61½	62	63	63	64	64	65	65½	66	66½
.6	62	62½	63	63½	64	64½	65	65½	66	66½
.7	62	62½	63	63½	64	64½	65	66	66	67
.8	62½	63	63½	64	64½	65	65½	66	66½	67
.9	62½	63	63½	64	64½	65	65½	66	67	67
32.0	62½	63	64	64	65	65½	66	66½	67	67½
.1	63	63½	64	64½	65	65½	66	66½	67	67½
.2	63	63½	64	64½	65	66	66	67	67½	68
.3	63	64	64½	65	65½	66	66½	67	67½	68
.4	63½	64	64½	65	65½	66	66½	67	68	68
.5	63½	64	65	65	66	66½	67	67½	68	68½
.6	64	64½	65	65½	66	66½	67	67½	68	69
.7	64	64½	65	65½	66	67	67	68	68½	69
.8	64	65	65½	66	66½	67	67½	68	68½	69
.9	64½	65	65½	66	66½	67	67½	68	69	69½
33.0	64½	65	66	66	67	67½	68	68½	69	69½
.1	65	65½	66	66½	67	67½	68	68½	69	70
.2	65	65½	66	66½	67	68	68½	69	69½	70
.3	65	66	66½	67	67½	68	68½	69	69½	70
.4	65½	66	66½	67	67½	68	69	69	70	70½
.5	65½	66	67	67	68	68½	69	69½	70	70½
.6	66	66½	67	67½	68	68½	69	69½	70	71
.7	66	66½	67	67½	68	69	69½	70	70½	71
.8	66	67	67½	68	68½	69	69½	70	70½	71
.9	66½	67	67½	68	68½	69	70	70½	71	71½

Lengths.	24. MEAN DIAMETERS.									
	24.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
34.0	66½	67	67½	68½	69	69½	70	70½	71	71½
.1	67	67½	68	68½	69	69½	70	71	71½	72
.2	67	67½	68	69	69	70	70½	71	71½	72
.3	67	68	68	69	69½	70	70½	71	72	72½
.4	67½	68	68½	69	69½	70	71	71½	72	72½
.5	67½	68	68½	69	70	70½	71	71½	72	73
.6	68	68½	69	69½	70	70½	71	72	72½	73
.7	68	68½	69	69½	70	71	71½	72	72½	73
.8	68	69	69	70	70½	71	71½	72	73	73½
.9	68½	69	69½	70	70½	71	72	72½	73	73½
35.0	68½	69	69½	70	71	71½	72	72½	73	74
.1	69	69½	70	70½	71	71½	72	73	73½	74
.2	69	69½	70	70½	71	72	72½	73	73½	74
.3	69	70	70	71	71½	72	72½	73	74	74½
.4	69½	70	70½	71	71½	72	73	73½	74	74½
.5	69½	70	70½	71	72	72½	73	73½	74	75
.6	70	70½	71	71½	72	72½	73	74	74½	75
.7	70	70½	71	71½	72	73	73½	74	74½	75
.8	70	71	71	72	72½	73	73½	74	75	75½
.9	70½	71	71½	72	72½	73	74	74½	75	75½
36.0	70½	71	71½	72	73	73½	74	74½	75	76
.1	70½	71	72	72½	73	73½	74	75	75½	76
.2	71	71½	72	72½	73	74	74½	75	75½	76½
.3	71	71½	72	73	73½	74	74½	75	76	76½
.4	71	72	72½	73	73½	74	75	75½	76	77
.5	71½	72	72½	73	74	74½	75	75½	76½	77
.6	71½	72	73	73½	74	74½	75½	76	76½	77
.7	72	72½	73	73½	74	75	75½	76	77	77½
.8	72	72½	73	74	74½	75	76	76½	77	77½
.9	72	73	73½	74	74½	75½	76	76½	77	78
37.0	72½	73	73½	74	75	75½	76	77	77½	78
.1	72½	73	74	74½	75	76	76½	77	77½	78
.2	73	73½	74	74½	75	76	76½	77	78	78½
.3	73	73½	74	75	75½	76	77	77½	78	78½
.4	73	74	74½	75	75½	76½	77	77½	78	79
.5	73½	74	74½	75	76	76½	77	78	78½	79
.6	73½	74	75	75½	76	77	77½	78	78½	79
.7	74	74½	75	75½	76	77	77½	78	79	79½
.8	74	74½	75	76	76½	77	78	78½	79	79½
.9	74	75	75½	76	76½	77½	78	78½	79	80

Lengths.	24. MEAN DIAMETERS.									
	24.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Lengths.	25. MEAN DIAMETERS.									
	25.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
28.0.....	59½	60	60½	61	61½	62	62½	63	63½	64
.1.....	60	60	60½	61	61½	62	62½	63	63½	64
.2.....	60	60½	61	61½	62	62½	63	63½	64	64½
.3.....	60	60½	61	61½	62	62½	63	63½	64	64½
.4.....	60½	61	61½	62	62½	63	63½	64	64½	65
.5.....	60½	61	61½	62	62½	63	63½	64	64½	65
.6.....	61	61½	62	62	63	63	64	64	65	65
.7.....	61	61½	62	62½	63	63½	64	64½	65	65½
.8.....	61	62	62	62½	63	63½	64	64½	65	65½
.9.....	61½	62	62½	63	63½	64	64½	65	65½	65½
29.0.....	61½	62	62½	63	63½	64	64½	65	65½	66
.1.....	62	62½	63	63½	64	64½	65	65½	66	66½
.2.....	62	62½	63	63½	64	64½	65	65½	66	66½
.3.....	62	63	63	64	64	65	65	66	66½	67
.4.....	62½	63	63½	64	64½	65	65½	66	66½	67
.5.....	62½	63	63½	64	65	65	66	66	67	67½
.6.....	63	63½	64	64½	65	65½	66	66½	67	67½
.7.....	63	63½	64	64½	65	65½	66	66½	67	68
.8.....	63½	64	64½	65	65½	66	66½	67	67½	68
.9.....	63½	64	64½	65	65½	66	66½	67	67½	68
30.0.....	64	64	65	65	66	66½	67	67½	68	68½
.1.....	64	64½	65	65½	66	66½	67	67½	68	68½
.2.....	64	64½	65	66	66	67	67½	68	68½	69
.3.....	64½	65	65½	66	66½	67	67½	68	68½	69
.4.....	64½	65	65½	66	66½	67	68	68½	69	69½
.5.....	65	65½	66	66½	67	67½	68	68½	69	69½
.6.....	65	65½	66	66½	67	67½	68	69	69½	70
.7.....	65	66	66	67	67½	68	68½	69	69½	70
.8.....	65½	66	66½	67	67½	68	68½	69	70	70
.9.....	65½	66	66½	67	68	68	69	69½	70	70½

Lengths.	25. MEAN DIAMETERS.									
	25.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
31.0	66	66½	67	67½	68	68½	69	69½	70	70½
.1	66	66½	67	67½	68	69	69	70	70½	71
.2	66½	67	67½	68	68½	69	69½	70	70½	71
.3	66½	67	67½	68	68½	69	70	70	71	71½
.4	67	67½	68	68½	69	69½	70	70½	71	71½
.5	67	67½	68	68½	69	69½	70	71	71	72
.6	67	68	68	69	69½	70	70½	71	71½	72
.7	67½	68	68½	69	69½	70	70½	71	72	72
.8	67½	68	68½	69	70	70½	71	71½	72	72½
.9	68	68½	69	69½	70	70½	71	71½	72	73
32.0	68	68½	69	69½	70	71	71	72	72½	73
.1	68	69	69½	70	70½	71	71½	72	72½	73
.2	68½	69	69½	70	70½	71	72	72½	73	73½
.3	68½	69	70	70	71	71½	72	72½	73	73½
.4	69	69½	70	70½	71	71½	72	73	73½	74
.5	69	69½	70	70½	71	72	72½	73	73½	74
.6	69½	70	70½	71	71½	72	72½	73	74	74½
.7	69½	70	70½	71	71½	72	73	73½	74	74½
.8	70	70	71	71½	72	72½	73	73½	74	75
.9	70	70½	71	71½	72	72½	73½	74	74½	75
33.0	70	70½	71½	72	72½	73	73½	74	74½	75
.1	70½	71	71½	72	72½	73	74	74½	75	75½
.2	70½	71	72	72½	73	73½	74	74½	75	75½
.3	71	71½	72	72½	73	73½	74	75	75½	76
.4	71	71½	72	73	73½	74	74½	75	75½	76
.5	71	72	72½	73	73½	74	74½	75	76	76½
.6	71½	72	72½	73	74	74½	75	75½	76	76½
.7	71½	72	73	73½	74	74½	75	75½	76	77
.8	72	72½	73	73½	74	75	75½	76	76½	77
.9	72	72½	73	74	74½	75	75½	76	76½	77
34.0	72½	73	73½	74	74½	75	76	76½	77	77½
.1	72½	73	74	74	75	75½	76	76½	77	78
.2	73	73½	74	74½	75	75½	76	77	77½	78
.3	73	73½	74	74½	75	76	76½	77	77½	78
.4	73	74	74½	75	75½	76	76½	77½	78	78½
.5	73½	74	74½	75	75½	76	77	77½	78	78½
.6	73½	74	75	75½	76	76½	77	78	78½	79
.7	74	74½	75	75½	76	77	77½	78	78½	79
.8	74	74½	75	76	76½	77	77½	78	79	79½
.9	74	75	75½	76	76½	77	78	78½	79	79½

Lengths.	25. MEAN DIAMETERS.									
	25.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
35.0	74½	75	75½	76	77	77½	78	78½	79	80
.1	74½	75	76	76½	77	77½	78	79	79½	80
.2	75	75½	76	76½	77	78	78½	79	79½	80½
.3	75	75½	76	77	77½	78	78½	79	80	80½
.4	75	76	76½	77	77½	78½	79	79½	80	80½
.5	75½	76	76½	77	78	78½	79	80	80½	81
.6	75½	76½	77	77½	78	79	79½	80	80½	81
.7	76	76½	77	77½	78½	79	79½	80	81	81
.8	76	77	77	78	78½	79	80	80½	81	81½
.9	76	77	77½	78	79	79½	80	80½	81	82
36.0	76½	77	77½	78½	79	79½	80	81	81½	82
.1	77	77½	78	78½	79	80	80½	81	82	82½
.2	77	77½	78	79	79½	80	80½	81½	82	82½
.3	77	78	78½	79	79½	80	81	81½	82	83
.4	77½	78	78½	79	80	80½	81	82	82½	83
.5	77½	78	79	79½	80	80½	81½	82	82½	83
.6	78	78½	79	79½	80½	81	81½	82	83	83½
.7	78	78½	79	80	80½	81	82	82½	83	84
.8	78	79	79½	80	81	81½	82	82½	83	84
.9	78½	79	79½	80½	81	81½	82	83	83½	84
37.0	78½	79	80	80½	81	82	82½	83	84	84½
.1	79	79½	80	81	81½	82	82½	83½	84	84½
.2	79	79½	80½	81	81½	82	83	83½	84	85
.3	79	80	80½	81	82	82½	83	84	84½	85
.4	79½	80	81	81½	82	82½	83½	84	84½	85½
.5	79½	80½	81	81½	82	83	83½	84	85	85½
.6	80	80½	81	82	82½	83	84	84½	85	86
.7	80	81	81½	82	82½	83½	84	84½	85½	86
.8	80½	81	81½	82	83	83½	84	85	85½	86
.9	80½	81	82	82½	83	84	84½	85	86	86½
38.0	81	81½	82	82½	83½	84	84½	85½	86	86½
.1	81	81½	82	83	83½	84½	85	85½	86½	87
.2	81	82	82½	83	84	84½	85	86	86½	87
.3	81½	82	82½	83½	84	85	85½	86	87	87½
.4	81½	82	83	83½	84	85	85½	86	87	87½
.5	82	82½	83	84	84½	85	86	86½	87	88
.6	82	82½	83½	84	84½	85½	86	86½	87½	88
.7	82	83	83½	84	85	85½	86	87	87½	88
.8	82½	83	84	84½	85	86	86½	87	88	88½
.9	82½	83½	84	84½	85½	86	86½	87½	88	88½

Lengths.	25. MEAN DIAMETERS.									
	25.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Lengths.	26. MEAN DIAMETERS.									
	26.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
29.0.....	66½	67	67½	68	68½	69	70	70	71	71½
.1.....	67	67½	68	68½	69	69½	70	70½	71	71½
.2.....	67	67½	68	68½	69	70	70	71	71½	72
.3.....	67½	68	68	69	69½	70	70½	71	71½	72
.4.....	67½	68	68½	69	69½	70	71	71	72	72½
.5.....	68	68½	69	69½	70	70½	71	71½	72	72½
.6.....	68	68½	69	69½	70	70½	71	72	72	73
.7.....	68	69	69½	70	70½	71	71½	72	72½	73
.8.....	68½	69	69½	70	70½	71	71½	72	73	73½
.9.....	68½	69	70	70½	71	71½	72	72½	73	73½
30.0.....	69	69½	70	70½	71	71½	72	73	73	74
.1.....	69	70	70	71	71½	72	72½	73	73½	74
.2.....	69½	70	70½	71	71½	72	72½	73	74	74½
.3.....	69½	70	71	71	72	72½	73	73½	74	74½
.4.....	70	70½	71	71½	72	72½	73	73½	74	75
.5.....	70	70½	71	72	72	73	73½	74	74½	75
.6.....	70½	71	71½	72	72½	73	73½	74	75	75
.7.....	70½	71	71½	72	73	73½	74	74½	75	75½
.8.....	71	71½	72	72½	73	73½	74	74½	75	76
.9.....	71	71½	72	72½	73	74	74½	75	75½	76
31.0.....	71	72	72½	73	73½	74	74½	75	76	76½
.1.....	71½	72	72½	73	73½	74	75	75½	76	76½
.2.....	72	72½	73	73½	74	74½	75	75½	76	77
.3.....	72	72½	73	73½	74	75	75½	76	76½	77
.4.....	72	73	73½	74	74½	75	75½	76	76½	77
.5.....	72½	73	73½	74	74½	75	76	76½	77	77½
.6.....	72½	73	74	74½	75	75½	76	76½	77	78
.7.....	73	73½	74	74½	75	75½	76	77	77½	78
.8.....	73	73½	74	75	75½	76	76½	77	77½	78
.9.....	73½	74	74½	75	75½	76	77	77½	78	78½

Lengths.	26. MEAN DIAMETERS.									
	26.0	.1	.2	.3	.4	.5	.6	.7	8.	.9
32. 0	73½	74	74½	75	76	76½	77	77½	78	79
.1	74	74½	75	75½	76	76½	77	78	78½	79
.2	74	74½	75	76	76½	77	77½	78	78½	79
.3	74	75	75½	76	76½	77	78	78	79	79½
.4	74½	75	75½	76	77	77½	78	78½	79	80
.5	74½	75	76	76½	77	77½	78	79	79½	80
.6	75	75½	76	77	77	78	78½	79	79½	80
.7	75	76	76½	77	77½	78	78½	79	80.	80½
.8	75½	76	76½	77	78	78½	79	79½	80	80½
.9	75½	76	77	77½	78	78½	79	80	80½	81
33. 0	76	76½	77	77½	78	79	79½	80	80½	81
.1	76	76½	77	78	78½	79	79½	80	81	81½
.2	76½	77	77½	78	78½	79	80	80½	81	82
.3	76½	77	78	78½	79	79½	80	81	81½	82
.4	77	77½	78	78½	79	80	80½	81	81½	82
.5	77	77½	78	79	79½	80	80½	81	82	82½
.6	77	78	78½	79	79½	80	81	81½	82	83
.7	77½	78	78½	79	80	80½	81	81½	82	83
.8	77½	78	79	79½	80	81	81½	82	82½	83
.9	78	78½	79	79½	80½	81	81½	82	83	83½
34. 0	78	78½	79½	80	80½	81	82	82½	83	83½
.1	78½	79	79½	80	81	81½	82	82½	83	84
.2	78½	79	80	80½	81	81½	82½	83	83½	84
.3	79	79½	80	80½	81	82	82½	83	84	84½
.4	79	79½	80½	81	81½	82	83	83½	84	84½
.5	79½	80	80½	81	82	82½	83	83½	84	85
.6	79½	80	81	81½	82	82½	83	84	84½	85
.7	80	80½	81	81½	82	83	83½	84	85	85½
.8	80	80½	81	82	82½	83	84	84½	85	85½
.9	80	81	81½	82	83	83½	84	84½	85	86
35. 0	80½	81	81½	82½	83	83½	84	85	85½	86
.1	80½	81½	82	82½	83	84	84½	85	86	86½
.2	81	81½	82	83	83½	84	84½	85½	86	86½
.3	81	82	82½	83	83½	84	85	85½	86	87
.4	81½	82	82½	83	84	84½	85	86	86½	87
.5	81½	82	83	83½	84	85	85½	86	86½	87½
.6	82	82½	83	83½	84½	85	85½	86½	87	87½
.7	82	82½	83½	84	84½	85	86	86½	87	88
.8	82½	83	83½	84	85	85½	86	87	87½	88
.9	82½	83	84	84½	85	86	86½	87	87½	88½

Lengths.	26. MEAN DIAMETERS.									
	26.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
36.0	83	83½	84	84½	85½	86	86½	87	88	88½
.1	83	83½	84	85	85½	86	87	87½	88	89
.2	83	84	84½	85	86	86½	87	88	88½	89
.3	83½	84	85	85½	86	86½	87½	88	88½	89½
.4	83½	84½	85	85½	86	87	87½	88	89	89½
.5	84	84½	85	86	86½	87	88	88½	89	90
.6	84	85	85½	86	87	87½	88	89	89½	90
.7	84½	85	85½	86½	87	87½	88	89	89½	90
.8	84½	85	86	86½	87	88	88½	89	90	90½
.9	85	85½	86	87	87½	88	88½	89½	90	91
37.0	85	85½	86½	87	87½	88½	89	89½	90½	91
.1	85½	86	86½	87	88	88½	89	90	90½	91
.2	85½	86	87	87½	88	89	89½	90	91	91½
.3	86	86½	87	88	88½	89	90	90½	91	92
.4	86	86½	87½	88	88½	89½	90	90½	91½	92
.5	86	87	87½	88	89	89½	90	91	91½	92
.6	86½	87	88	88½	89	90	90½	91	92	92½
.7	86½	87½	88	88½	89½	90	90½	91½	92	93
.8	87	87½	88	89	89½	90	91	91½	92½	93
.9	87	88	88½	89	90	90½	91	92	92½	93
38.0	87½	88	88½	89½	90	91	91	92	93	93½
.1	87½	88	89	89½	90	91	91½	92½	93	93½
.2	88	88½	89	90	90½	91	91½	92½	93	94
.3	88	88½	89½	90	91	91½	92	93	93½	94
.4	88	89	89½	90½	91	91½	92	93	94	94½
.5	88½	89	90	90½	91	92	92½	93½	94	95
.6	88½	89½	90	91	91½	92	92½	93½	94	95
.7	89	89½	90½	91	92	92½	93	94	94½	95
.8	89	90	90½	91	92	92½	93½	94	95	95½
.9	89½	90	91	91½	92	93	93½	94	95	96
39.0	89½	90½	91	92	92½	93	94	94½	95	96
.1	90	90½	91	92	92½	93½	94	95	95½	96
.2	90	91	91½	92	93	93½	94½	95	96	96½
.3	90½	91	92	92½	93	94	94½	95	96	96½
.4	90½	91	92	92½	93½	94	95	95½	96	97
.5	91	91½	92	93	93½	94½	95	96	96½	97
.6	91	91½	92½	93	94	94½	95	96	97	97½
.7	91	92	92½	93½	94	95	95½	96	97	97½
.8	91½	92	93	93½	94½	95	96	96½	97	98
.9	92	92½	93	94	94½	95	96	97	97½	98

Lengths.	26. MEAN DIAMETERS.									
	26.0	.1	.2	.3	.4	.5	.6	.7	.8	.9

Lengths.	27. MEAN DIAMETERS.									
	27.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
30.0	74½	75	75½	76	76½	77	77½	78	79	79½
.1	74½	75	75½	76	77	77½	78	78½	79	79½
.2	75	75½	76	76½	77	77½	78	79	79½	80
.3	75	75½	76	77	77½	78	78½	79	79½	80
.4	75½	76	76½	77	77½	78	79	79½	80	80½
.5	75½	76	76½	77	78	78½	79	79½	80	81
.6	76	76½	77	77½	78	78½	79	80	80½	81
.7	76	76½	77	78	78½	79	79½	80	80½	81
.8	76½	77	77½	78	78½	79	80	80½	81	81½
.9	76½	77	77½	78½	79	79½	80	80½	81	82
31.0	77	77½	78	78½	79	80	80	81	81½	82
.1	77	77½	78	79	79½	80	80½	81	82	82½
.2	77½	78	78½	79	79½	80	81	81½	82	82½
.3	77½	78	79	79½	80	80½	81	81½	82½	83
.4	78	78½	79	79½	80	81	81½	82	82½	83
.5	78	78½	79	80	80½	81	81½	82	83	83½
.6	78½	79	79½	80	80½	81	82	82½	83	83½
.7	78½	79	80	80½	81	81½	82	82½	83½	84
.8	79	79½	80	80½	81	82	82½	83	83½	84
.9	79	79½	80	81	81½	82	82½	83	84	84½
32.0	79½	80	80½	81	81½	82	83	83½	84	84½
.1	79½	80	81	81½	82	82½	83	84	84½	85
.2	80	80½	81	81½	82	83	83½	84	84½	85
.3	80	80½	81	82	82½	83	83½	84	85	85½
.4	80½	81	81½	82	83	83½	84	84½	85	86
.5	80½	81	82	82½	83	83½	84	85	85½	86
.6	81	81½	82	82½	83	84	84½	85	85½	86½
.7	81	81½	82	83	83½	84	84½	85½	86	86½
.8	81½	82	82½	83	84	84½	85	85½	86	87
.9	81½	82	83	83½	84	84½	85	86	86½	87

Lengths.	27. MEAN DIAMETERS.									
	27.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
33.0	82	82½	83	83½	84	85	85½	86	87	87½
.1	82	82½	83	84	84½	85	86	86½	87	87½
.2	82½	83	83½	84	85	85½	86	86½	87	88
.3	82½	83	84	84½	85	85½	86	87	87½	88
.4	83	83½	84	84½	85½	86	86½	87	88	88½
.5	83	83½	84	85	85½	86	87	87½	88	88½
.6	83½	84	84½	85	86	86½	87	87½	88½	89
.7	83½	84	85	85½	86	86½	87	88	88½	89
.8	84	84½	85	85½	86½	87	87½	88	89	89½
.9	84	84½	85	86	86½	87	88	88½	89	90
34.0	84½	85	85½	86	87	87½	88	88½	89½	90
.1	84½	85	86	86½	87	87½	88½	89	89½	90½
.2	85	85½	86	86½	87½	88	88½	89	90	90½
.3	85	85½	86	87	87½	88	89	89½	90	91
.4	85½	86	86½	87	88	88½	89	90	90½	91
.5	85½	86	87	87½	88	89	89½	90	90½	91½
.6	86	86½	87	87½	88½	89	89½	90	91	91½
.7	86	86½	87	88	88½	89	90	90½	91	92
.8	86½	87	87½	88	89	89½	90	91	91½	92
.9	86½	87	88	88½	89	90	90½	91	91½	92½
35.0	87	87½	88	88½	89½	90	90½	91½	92	92½
.1	87	87½	88	89	89½	90	91	91½	92	93
.2	87	88	88½	89	90	90½	91	92	92½	93
.3	87½	88	89	89½	90	91	91½	92	93	93½
.4	88	88½	89	90	90½	91	91½	92½	93	93½
.5	88	88½	89	90	90½	91	92	92½	93½	94
.6	88	89	89½	90	91	91½	92	93	93½	94
.7	88½	89	90	90½	91	92	92½	93	94	94½
.8	89	89½	90	91	91½	92	93	93½	94	95
.9	89	89½	90	91	91½	92½	93	93½	94½	95
36.0	89	90	90½	91	92	92½	93	94	94½	95½
.1	89½	90	91	91½	92	93	93½	94	95	95½
.2	90	90½	91	92	92½	93	94	94½	95	96
.3	90	90½	91	92	92½	93½	94	94½	95½	96
.4	90	91	91½	92	93	93½	94	95	95½	96½
.5	90½	91	92	92½	93	94	94½	95	96	96½
.6	91	91½	92	93	93½	94	95	95½	96	97
.7	91	91½	92	93	93½	94½	95	96	96½	97
.8	91	92	92½	93½	94	94½	95½	96	96½	97½
.9	91½	92	93	93½	94	95	95½	96½	97	97½

Lengths.	27. MEAN DIAMETERS.									
	27.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
37.0	92	92½	93	94	94½	95	96	96½	97	98
.1	92	92½	93½	94	95	95½	96	97	97½	98
.2	92	93	93½	94	95	95½	96½	97	98	98½
.3	92½	93	94	94½	95	96	96½	97½	98	99
.4	92½	93½	94	95	95½	96	97	97½	98	99
.5	93	93½	94½	95	96	96½	97	98	98½	99
.6	93	94	94½	95	96	96½	97½	98	99	99½
.7	93½	94	95	95½	96	97	97½	98½	99	100
.8	93½	94½	95	96	96½	97	98	98½	99½	100
.9	94	94½	95½	96	97	97½	98	99	99½	100½
38.0	94	95	95½	96	97	98	98½	99	100	100½
.1	94½	95	96	96½	97	98	98½	99½	100	101
.2	94½	95½	96	97	97½	98	99	99½	100½	101
.3	95	95½	96½	97	98	98½	99	100	100½	101½
.4	95	96	96½	97½	98	99	99½	100	101	101½
.5	95½	96	97	97½	98	99	100	100½	101	102
.6	95½	96½	97	98	98½	99	100	100½	101½	102
.7	96	96½	97½	98	99	99½	100	101	101½	102½
.8	96	97	97½	98½	99	100	100½	101	102	102½
.9	96½	97	98	98½	99	100	101	101½	102	103
39.0	96½	97½	98	99	99½	100	101	102	102½	103
.1	97	97½	98½	99	100	100½	101	102	103	103½
.2	97	98	98½	99½	100	101	101½	102	103	104
.3	97½	98	99	99½	100½	101	102	102½	103	104
.4	97½	98½	99	100	100½	101½	102	103	103½	104
.5	98	98½	99½	100	101	101½	102½	103	104	104½
.6	98	99	99½	100½	101	102	102½	103½	104	105
.7	98½	99	100	100½	101½	102	103	103½	104½	105
.8	98½	99½	100	101	101½	102½	103	104	104½	105½
.9	99	99½	100½	101	102	102½	103½	104	105	105½
40.0	99	100	100½	101½	102	103	103½	104½	105	106
.1	99½	100	101	101½	102½	103	104	104½	105½	106
.2	99½	100½	101	102	102½	103½	104	105	105½	106½
.3	100	100½	101½	102	103	103½	104½	105	106	106½
.4	100	101	101½	102½	103	104	104½	105½	106	107
.5	100½	101	102	102½	103½	104	105	105½	106½	107
.6	100½	101½	102	103	103½	104½	105	106	106½	107½
.7	101	101½	102½	103	104	104½	105½	106	107	108
.8	101	102	102½	103½	104	105	105½	106½	107	108
.9	101½	102	103	103½	104½	105	106	106½	107½	108

Lengths.	27. MEAN DIAMETERS.									
	27.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Lengths.	28. MEAN DIAMETERS.									
	28.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
31.0.....	82½	83	84	84½	85	85½	86	87	87½	88
.1.....	83	83½	84	84½	85	86	86½	87	88	88½
.2.....	83	84	84½	85	85½	86	87	87½	88	88½
.3.....	83½	84	84½	85	86	86½	87	87½	88	89
.4.....	83½	84	85	85½	86	87	87½	88	88½	89
.5.....	84	84½	85	86	86½	87	87½	88	89	89½
.6.....	84	85	85½	86	86½	87	88	88½	89	90
.7.....	84½	85	86	86½	87	87½	88	89	89½	90
.8.....	85	85½	86	86½	87	88	88½	89	89½	90½
.9.....	85	85½	86	87	87½	88	89	89½	90	90½
32.0.....	85	86	86½	87	88	88½	89	89½	90	91
.1.....	85½	86	87	87½	88	88½	89	90	90½	91
.2.....	86	86½	87	87½	88½	89	89½	90	91	91½
.3.....	86	87	87½	88	88½	89	90	90½	91	92
.4.....	86½	87	87½	88	89	89½	90	91	91½	92
.5.....	86½	87	88	88½	89	90	90½	91	91½	92
.6.....	87	87½	88	89	89½	90	90½	91	92	92½
.7.....	87	88	88½	89	89½	90½	91	91½	92	93
.8.....	87½	88	88½	89½	90	90½	91	92	92½	93
.9.....	87½	88½	89	89½	90	91	91½	92	93	93½
33.0.....	88	88½	89	90	90½	91	92	92½	93	94
.1.....	88	89	89½	90	91	91½	92	92½	93½	94
.2.....	88½	89	90	90½	91	91½	92½	93	93½	94
.3.....	89	89½	90	90½	91½	92	92½	93	94	94½
.4.....	89	89½	90½	91	91½	92	93	93½	94	95
.5.....	89	90	90½	91	92	92½	93	94	94½	95
.6.....	89½	90	91	91½	92	93	93½	94	95	95½
.7.....	90	90½	91	92	92½	93	94	94½	95	95½
.8.....	90	91	91½	92	92½	93½	94	94½	95½	96
.9.....	90½	91	91½	92½	93	93½	94	95	95½	96

Lengths.	28. MEAN DIAMETERS.									
	28.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
34.0	90½	91	92	92½	93	94	94½	95	96	96½
.1	91	91½	92	93	93½	94	95	95½	96	97
.2	91	92	92½	93	94	94½	95	96	96½	97
.3	91½	92	93	93½	94	95	95½	96	97	97½
.4	91½	92½	93	93½	94½	95	95½	96½	97	97½
.5	92	92½	93	94	94½	95	96	96½	97	98
.6	92	93	93½	94	95	95½	96	97	97½	98
.7	92½	93	94	94½	95	96	96½	97	98	98½
.8	93	93½	94	95	95½	96	97	97½	98	99
.9	93	93½	94½	95	96	96½	97	98	98½	99
35.0	93	94	94½	95½	96	96½	97½	98	99	99½
.1	93½	94	95	95½	96	97	97½	98	99	99½
.2	94	94½	95	96	96½	97	98	98½	99	100
.3	94	95	95½	96	97	97½	98	99	99½	100
.4	94½	95	96	96½	97	98	98½	99	100	100½
.5	94½	95½	96	96½	97½	98	99	99½	100	101
.6	95	95½	96	97	97½	98½	99	99½	100½	101
.7	95	96	96½	97	98	98½	99	100	100½	101½
.8	95½	96	97	97½	98	99	99½	100	101	101½
.9	95½	96½	97	98	98½	99	100	100½	101	102
36.0	96	96½	97½	98	99	99½	100	101	101½	102
.1	96	97	97½	98½	99	99½	100½	101	102	102½
.2	96½	97	98	98½	99	100	100½	101½	102	103
.3	97	97½	98	99	99½	100	101	101½	102½	103
.4	97	98	98½	99	100	100½	101	102	102½	103½
.5	97	98	98½	99½	100	101	101½	102	103	103½
.6	97½	98	99	99½	100½	101	102	102½	103	104
.7	98	98½	99	100	100½	101½	102	103	103½	104
.8	98	99	99½	100	101	101½	102½	103	104	104½
.9	98½	99	100	100½	101	102	102½	103½	104	105
37.0	98½	99½	100	101	101½	102	103	103½	104½	105
.1	99	99½	100½	101	102	102½	103	104	104½	105½
.2	99	100	100½	101	102	103	103½	104	105	105½
.3	99½	100	101	101½	102	103	104	104½	105	106
.4	99½	100½	101	102	102½	103	104	105	105½	106
.5	100	100½	101½	102	103	103½	104	105	106	106½
.6	100	101	101½	102½	103	104	104½	105½	106	107
.7	100½	101	102	102½	103½	104	105	105½	106½	107
.8	101	101½	102	103	103½	104½	105	106	106½	107½
.9	101	102	102½	103	104	104½	105½	106	107	107½

Lengths.	28. MEAN DIAMETERS.									
	28.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
38.0	101	102	103	103½	104	105	105½	106½	107	108
.1	101½	102	103	104	104½	105	106	107	107½	108
.2	102	102½	103	104	105	105½	106	107	108	108½
.3	102	103	103½	104	105	106	106½	107	108	109
.4	102½	103	104	104½	105½	106	107	107½	108	109
.5	102½	103½	104	105	105½	106½	107	108	108½	109½
.6	103	103½	104½	105	106	106½	107½	108	109	109½
.7	103	104	104½	105½	106	107	107½	108½	109	110
.8	103½	104	105	105½	106½	107	108	108½	109½	110
.9	103½	104½	105	106	106½	107½	108	109	110	110½
39.0	104	105	105½	106	107	108	108½	109	110	111
.1	104	105	106	106½	107	108	109	109½	110	111
.2	104½	105	106	107	107½	108	109	110	110½	111½
.3	105	105½	106	107	108	108½	109	110	111	111½
.4	105	106	106½	107	108	109	109½	110½	111	112
.5	105	106	107	107½	108½	109	110	110½	111½	112
.6	105½	106½	107	108	108½	109½	110	111	111½	112½
.7	106	106½	107½	108	109	109½	110½	111	112	113
.8	106	107	107½	108½	109	110	110½	111½	112	113
.9	106½	107	108	108½	109½	110	111	112	112½	113½
40.0	106½	107½	108	109	109½	110½	111	112	113	113½
.1	107	107½	108½	109	110	111	111½	112½	113	114
.2	107	108	108½	109½	110	111	112	112½	113½	114
.3	107½	108	109	110	110½	111	112	113	113½	114½
.4	107½	108½	109	110	111	111½	112½	113	114	115
.5	108	109	109½	110	111	112	112½	113½	114	115
.6	108	109	110	110½	111½	112	113	114	114½	115
.7	108½	109	110	111	111½	112½	113	114	115	115½
.8	109	109½	110½	111	112	112½	113½	114	115	116
.9	109	110	110½	111½	112	113	114	114½	115½	116
41.0	109	110	111	111½	112½	113	114	115	115½	116½
.1	109½	110½	111	112	113	113½	114½	115	116	117
.2	110	110½	111½	112	113	114	114½	115½	116	117
.3	110	111	111½	112½	113	114	115	115½	116½	117
.4	110½	111	112	113	113½	114½	115	116	117	117½
.5	110½	111½	112	113	114	114½	115½	116	117	118
.6	111	111½	112½	113	114	115	115½	116½	117½	118
.7	111	112	113	113½	114½	115	116	117	117½	118½
.8	111½	112	113	114	114½	115½	116	117	118	119
.9	111½	112½	113	114	115	116	116½	117½	118	119

Lengths.	28. MEAN DIAMETERS.									
	28.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Lengths.	29. MEAN DIAMETERS.									
	29.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
32.0.....	91½	92	93	93½	94	94½	95½	96	96½	97
.1.....	92	92½	93	93½	94½	95	95½	96	97	97½
.2.....	92	93	93½	94	94½	95	96	96½	97	98
.3.....	92½	93	93½	94	95	95½	96	97	97½	98
.4.....	92½	93	94	94½	95	96	96½	97	98	98½
.5.....	93	93½	94	95	95½	96	97	97½	98	99
.6.....	93	94	94½	95	96	96½	97	98	98½	99
.7.....	93½	94	95	95½	96	97	97½	98	99	99½
.8.....	94	94½	95	96	96½	97	98	98½	99	99½
.9.....	94	95	95½	96	96½	97½	98	98½	99½	100
33.0.....	94½	95	95½	96½	97	97½	98½	99	99½	100½
.1.....	94½	95	96	96½	97	98	98½	99	100	100½
.2.....	95	95½	96	97	97½	98	99	99½	100	101
.3.....	95	96	96½	97	98	98½	99	100	100½	101
.4.....	95½	96	97	97½	98	99	99½	100	101	101½
.5.....	96	96½	97	98	98½	99	100	100½	101	102
.6.....	96	97	97½	98	99	99½	100	101	101½	102
.7.....	96½	97	97½	98½	99	100	100½	101	102	102½
.8.....	96½	97½	98	98½	99½	100	100½	101½	102	103
.9.....	97	97½	98	99	99½	100½	101	101½	102½	103
34.0.....	97	98	98½	99	100	100½	101	102	102½	103½
.1.....	97½	98	99	99½	100	101	101½	102	103	103½
.2.....	98	98½	99	100	100½	101	102	102½	103	104
.3.....	98	99	99½	100	101	101½	102	103	103½	104
.4.....	98½	99	100	100½	101	102	102½	103	104	104½
.5.....	98½	99½	100	101	101½	102	103	103½	104	105
.6.....	99	99½	100½	101	101½	102½	103	104	104½	105
.7.....	99	100	100½	101	102	102½	103½	104	105	105½
.8.....	99½	100	101	101½	102	103	103½	104½	105	106
.9.....	100	100½	101	102	102½	103	104	104½	105½	106

Lengths.	29. MEAN DIAMETERS.									
	29.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
35. 0	100	101	101½	102	103	103½	104	105	105½	106½
.1	100½	101	102	102½	103	104	104½	105	106	106½
.2	100½	101½	102	103	103½	104	105	105½	106	107
.3	101	101½	102½	103	104	104½	105	106	106½	107
.4	101	102	102½	103½	104	105	105½	106	107	107½
.5	101½	102	103	103½	104½	105	106	106½	107	108
.6	102	102½	103	104	104½	105½	106	107	107½	108
.7	102	103	103½	104	105	105½	106½	107	108	108½
.8	102½	103	104	104½	105	106	106½	107½	108	109
.9	102½	103½	104	105	105½	106	107	107½	108½	109
36. 0	103	103½	104½	105	106	106½	107	108	108½	109½
.1	103	104	104½	105½	106	107	107½	108	109	110
.2	103½	104	105	105½	106½	107	108	108½	109	110
.3	104	104½	105	106	106½	107½	108	109	109½	110½
.4	104	105	105½	106	107	108	108½	109	110	110½
.5	104½	105	106	106½	107	108	109	109½	110	111
.6	104½	105½	106	107	107½	108	109	110	110½	111
.7	105	105½	106½	107	108	108½	109½	110	111	111½
.8	105	106	106½	107½	108	109	109½	110½	111	112
.9	105½	106	107	108	108½	109	110	110½	111½	112
37. 0	106	107½	107	108	109	109½	110	111	112	112½
.1	106	107	107½	108	109	110	110½	111	112	113
.2	106½	107	108	108½	109½	110	111	111½	112½	113
.3	106½	107½	108	109	109½	110½	111	112	112½	113½
.4	107	107½	108½	109	110	110½	111½	112	113	113½
.5	107	108	109	109½	110	111	112	112½	113	114
.6	107½	108	109	110	110½	111	112	113	113½	114
.7	108	108½	109	110	111	111½	112½	113	114	114½
.8	108	109	109½	110½	111	112	112½	113½	114	115
.9	108½	109	110	110½	111½	112	113	113½	114½	115
38. 0	108½	109½	110	111	111½	112½	113	114	115	115½
.1	109	109½	110½	111	112	113	113½	114	115	116
.2	109	110	111	111½	112	113	114	114½	115½	116
.3	109½	110	111	112	112½	113½	114	115	115½	116½
.4	110	110½	111½	112	113	113½	114½	115	116	117
.5	110	111	111½	112½	113	114	114½	115½	116	117
.6	110½	111	112	112½	113½	114	115	116	116½	117½
.7	110½	111½	112	113	114	114½	115	116	117	117½
.8	111	112	112½	113	114	115	115½	116½	117	118
.9	111	112	113	113½	114½	115	116	116½	117½	118

Lengths.	29. MEAN DIAMETERS.									
	29.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
39.0	111½	112½	113	114	114½	115½	116	117	118	118½
.1	112	112½	113½	114	115	115½	116½	117½	118	119
.2	112	113	113½	114½	115	116	117	117½	118½	119
.3	112½	113	114	114½	115½	116½	117	118	118½	119½
.4	112½	113½	114	115	116	116½	117½	118	119	120
.5	113	113½	114½	115	116	117	117½	118½	119	120
.6	113	114	115	115½	116½	117	118	119	119½	120½
.7	113½	114½	115	116	116½	117½	118½	119	120	120½
.8	114	114½	115½	116	117	118	118½	119½	120	121
.9	114	115	115½	116½	117½	118	119	119½	120½	121½
40.0	114½	115	116	117	117½	118½	119	120	121	121½
.1	114½	115½	116	117	118	118½	119½	120	121	122
.2	115	115½	116½	117½	118	119	120	120½	121½	122
.3	115	116	117	117½	118½	119	120	121	121½	122½
.4	115½	116½	117	118	118½	119½	120½	121	122	123
.5	116	116½	117½	118	119	120	120½	121½	122	123
.6	116	117	117½	118½	119½	120	121	122	122½	123½
.7	116½	117	118	119	119½	120½	121	122	123	123½
.8	116½	117½	118½	119	120	120½	121½	122½	123	124
.9	117	118	118½	119½	120	121	122	122½	123½	124½
41.0	117	118	119	119½	120½	121½	122	123	124	124½
.1	117½	118½	119	120	121	121½	122½	123	124	125
.2	118	118½	119½	120½	121	122	122½	123½	124½	125
.3	118	119	119½	120½	121½	122	123	124	124½	125½
.4	118½	119	120	121	121½	122½	123½	124	125	126
.5	118½	119½	120½	121	122	123	123½	124½	125½	126
.6	119	120	120½	121½	122½	123	124	125	125½	126½
.7	119½	120	121	121½	122½	123½	124	125	126	127
.8	119½	120½	121	122	123	123½	124½	125½	126	127
.9	120	120½	121½	122	123	124	125	125½	126½	127½
42.0	120	121	122	122½	123½	124½	125	126	127	127½
.1	120½	121	122	123	123½	124½	125½	126½	127	128
.2	120½	121½	122½	123	124	125	125½	126½	127½	128½
.3	121	122	122½	123½	124½	125	126	127	127½	128½
.4	121	122	123	124	124½	125½	126½	127	128	129
.5	121½	122½	123	124	125	126	126½	127½	128½	129
.6	122	122½	123½	124½	125	126	127	128	128½	129½
.7	122	123	124	124½	125½	126½	127	128	129	130
.8	122½	123	124	125	126	126½	127½	128½	129	130
.9	123	123½	124½	125	126	127	128	128½	129½	130½

Lengths.	29. MEAN DIAMETERS.									
	29.0	.1	.2	.3	.4	.5	.6	.7	.8	.9

Lengths.	30. MEAN DIAMETERS.									
	30.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
33.0	101	101½	102½	103	103½	104½	105	105½	106½	107
.1	101	102	102½	103	104	104½	105½	106	107	107½
.2	101½	102½	103	103½	104½	105	105½	106½	107	108
.3	102	102½	103	104	104½	105	106	106½	107½	108
.4	102	103	103½	104½	105	105½	106½	107	107½	108½
.5	102½	103	104	104½	105	106	106½	107½	108	109
.6	103	103½	104	105	105½	106½	107	107½	108½	109
.7	103	104	104½	105	106	106½	107	108	108½	109½
.8	103½	104	105	105½	106	107	107½	108½	109	109½
.9	103½	104½	105	106	106½	107	108	108½	109½	110
34.0	104	104½	105½	106	107	107½	108	109	109½	110½
.1	104½	105	106	106½	107	108	108½	109½	110	110½
.2	104½	105½	106	107	107½	108	109	109½	110½	111
.3	105	105½	106½	107	108	108½	109	110	110½	111
.4	105½	106	106½	107½	108	109	109½	110	111	111½
.5	105½	106	107	107½	108½	109	110	110½	111	112
.6	106	106½	107½	108	108½	109½	110	111	111½	112½
.7	106	107	107½	108	109	110	110½	111	112	112½
.8	106½	107	108	108½	109½	110	111	111½	112½	113
.9	107	107½	108	109	109½	110½	111	112	112½	113
35.0	107	108	108½	109½	110	110½	111½	112	113	113½
.1	107½	108	109	109½	110	111	112	112½	113	114
.2	107½	108½	109	110	111½	111½	112	113	113½	114½
.3	108	108½	109½	110	111	111½	112½	113	114	114½
.4	108½	109	110	110½	111	112	112½	113½	114	115
.5	108½	109½	110	111	111½	112½	113	114	114½	115
.6	109	109½	110½	111	112	112½	113½	114	115	115½
.7	109	110	110½	111½	112	113	113½	114½	115	116
.8	109½	110½	111	111½	112½	113	114	114½	115½	116
.9	110	110½	111½	112	113	113½	114½	115	116	116½

Lengths.	30. MEAN DIAMETERS.									
	30.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
36.0	110	111	111½	112½	113	114	114½	115	116	117
.1	110½	111	112	112½	113½	114	115	115½	116½	117
.2	111	111½	112½	113	113½	114½	115½	116	117	117½
.3	111	112	112½	113½	114	115	115½	116½	117	118
.4	111½	112	113	113½	114½	115	116	116½	117½	118
.5	111½	112½	113	114	114½	115½	116	117	117½	118½
.6	112	112½	113½	114	115	116	116½	117	118	119
.7	112	113	114	114½	115½	116	117	117½	118½	119
.8	112½	113½	114	115	115½	116½	117	118	118½	119½
.9	113	113½	114½	115	116	116½	117½	118	119	120
37.0	113	114	114½	115½	116½	117	118	118½	119½	120
.1	113½	114½	115	116	116½	117½	118	119	119½	120½
.2	114	114½	115½	116	117	117½	118½	119	120	121
.3	114	115	115½	116½	117	118	118½	119½	120½	121
.4	114½	115	116	116½	117½	118½	119	120	120½	121½
.5	115	115½	116½	117	118	118½	119½	120	121	121½
.6	115	116	116½	117½	118	119	119½	120½	121½	122
.7	115½	116	117	117½	118½	119	120	121	121½	122½
.8	115½	116½	117	118	119	119½	120½	121	122	122½
.9	116	117	117½	118½	119	120	120½	121½	122	123
38.0	116½	117	118	118½	119½	120	121	122	122½	123½
.1	116½	117½	118	119	119½	120½	121	122	123	123½
.2	117	117½	118½	119	120	121	121½	122½	123	124
.3	117	118	119	119½	120½	121	122	122½	123½	124½
.4	117½	118½	119	120	120½	121½	122½	123	124	124½
.5	118	118½	119½	120	121	122	122½	123½	124	125
.6	118	119	119½	120½	121½	122	123	123½	124½	125½
.7	118½	119	120	121	121½	122½	123	124	125	125½
.8	118½	119½	120½	121	122	122½	123½	124½	125	126
.9	119	120	120½	121½	122	123	124	124½	125½	126½
39.0	119½	120	121	121½	122½	123½	124	125	126	126½
.1	119½	120½	121	122	123	123½	124½	125½	126	127
.2	120	121	121½	122½	123	124	125	125½	126½	127½
.3	120½	121	122	122½	123½	124½	125	126	127	127½
.4	120½	121½	122	123	124	124½	125½	126½	127	128
.5	121	121½	122½	123½	124	125	126	126½	127½	128½
.6	121	122	123	123½	124½	125½	126	127	128	128½
.7	121½	122½	123	124	124½	125½	126½	127	128	129
.8	122	122½	123½	124	125	126	126½	127½	128½	129½
.9	122	123	123½	124½	125½	126	127	128	129	129½

Lengths.	30. MEAN DIAMETERS.									
	30.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
40.0	122½	123	124	125	125½	126½	127½	128	129	130
.1	122½	123½	124½	125	126	127	127½	128½	129½	130
.2	123	124	124½	125½	126½	127	128	129	129½	130½
.3	123½	124	125	126	126½	127½	128	129	130	131
.4	123½	124½	125½	126	127	128	128½	129½	130½	131
.5	124	124½	125½	126½	127	128	129	130	130½	131½
.6	124	125	126	126½	127½	128½	129½	130	131	132
.7	124½	125½	126	127	128	129	129½	130½	131	132
.8	125	125½	126½	127½	128	129	130	131	131½	132½
.9	125	126	127	127½	128½	129½	130	131	132	133
41.0	125½	126½	127	128	129	129½	130½	131½	132½	133
.1	126	126½	127½	128	129	130	131	132	132½	133½
.2	126	127	128	128½	129½	130½	131	132	133	134
.3	126½	127	128	129	130	130½	131½	132½	133	134
.4	126½	127½	128½	129	130	131	132	132½	133½	134½
.5	127	128	128½	129½	130½	131	132	133	134	135
.6	127½	128	129	130	130½	131½	132½	133½	134	135
.7	127½	128½	129	130	131	132	133	133½	134½	135½
.8	128	129	129½	130½	131½	132	133	134	135	136
.9	128	129	130	131	131½	132½	133½	134	135	136
42.0	128½	129½	130	131	132	133	133½	134½	135½	136½
.1	129	129½	130½	131½	132	133	134	135	136	137
.2	129	130	131	131½	132½	133½	134½	135½	136	137
.3	129½	130	131	132	133	134	134½	135½	136½	137½
.4	129½	130½	131½	132½	133	134	135	136	137	137½
.5	130	131	132	132½	133½	134½	135½	136	137	138
.6	130½	131	132	133	134	135	135½	136½	137½	138½
.7	130½	131½	132½	133	134	135	136	137	138	138½
.8	131	132	132½	133½	134½	135½	136½	137	138	139
.9	131½	132	133	134	135	135½	136½	137½	138½	139½
43.0	131½	132½	133½	134	135	136	137	138	139	139½
.1	132	133	133½	134½	135½	136½	137	138	139	140
.2	132	133	134	135	135½	136½	137½	138½	139½	140½
.3	132½	133½	134	135	136	137	138	139	139½	140½
.4	133	133½	134½	135½	136½	137	138	139	140	141
.5	133	134	135	136	136½	137½	138½	139½	140½	141
.6	133½	134½	135	136	137	138	139	140	140½	141½
.7	133½	134½	135½	136½	137	138	139	140	141	142
.8	134	135	136	136½	137½	138½	139½	140½	141½	142½
.9	134½	135	136	137	138	139	140	140½	141½	142½

Lengths.	30. MEAN DIAMETERS.									
	30.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Lengths.	31. MEAN DIAMETERS.									
	31.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
34.0.....	111	112	112½	113½	114	114½	115½	116	117	117½
.1.....	111½	112	113	113½	114	115	116	116½	117	118
.2.....	111½	112½	113	114	114½	115½	116	117	117½	118½
.3.....	112	113	113½	114	115	116	116½	117	118	118½
.4.....	112½	113	114	114½	115½	116	117	117½	118½	119
.5.....	113	113½	114	115	115½	116½	117	118	118½	119½
.6.....	113	114	114½	115½	116	116½	117½	118	119	119½
.7.....	113½	114	115	115½	116½	117	118	118½	119	120
.8.....	113½	114½	115	116	116½	117½	118	119	119½	120½
.9.....	114	115	115½	116	117	118	118½	119	120	121
35.0.....	114½	115	116	116½	117½	118	119	119½	120½	121
.1.....	114½	115½	116	117	117½	118½	119	120	120½	121½
.2.....	115	116	116½	117	118	119	119½	120½	121	122
.3.....	115½	116	117	117½	118½	119	120	120½	121½	122
.4.....	115½	116½	117	118	118½	119½	120	121	121½	122½
.5.....	116	117	117½	118	119	120	120½	121	122	123
.6.....	116½	117	118	118½	119½	120	121	121½	122½	123
.7.....	116½	117½	118	119	119½	120½	121	122	123	123½
.8.....	117	117½	118½	119	120	121	121½	122½	123	124
.9.....	117	118	119	119½	120½	121	122	122½	123½	124
36.0.....	117½	118½	119	120	120½	121½	122	123	124	124½
.1.....	118	118½	119½	120	121	122	122½	123½	124	125
.2.....	118½	119	120	120½	121½	122	123	123½	124½	125
.3.....	118½	119½	120	121	121½	122½	123	124	125	125½
.4.....	119	119½	120½	121	122	123	123½	124½	125	126
.5.....	119	120	121	121½	122½	123	124	124½	125½	126
.6.....	119½	120½	121	122	122½	123½	124½	125	126	126½
.7.....	120	120½	121½	122	123	124	124½	125½	126	127
.8.....	120	121	122	122½	123½	124	125	125½	126½	127½
.9.....	120½	121	122	123	123½	124½	125	126	127	127½

Lengths.	31. MEAN DIAMETERS.									
	31.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
37.0	121	121½	122½	123	124	125	125½	126½	127	128
.1	121	122	123	123½	124½	125	126	127	127½	128½
.2	121½	122½	123	124	124½	125½	126½	127	128	128½
.3	122	122½	123½	124	125	126	126½	127½	128	129
.4	122	123	124	124½	125½	126	127	128	128½	129½
.5	122½	123	124	125	125½	126½	127½	128	129	130
.6	123	123½	124½	125	126	127	127½	128½	129½	130
.7	123	124	125	125½	126½	127	128	129	129½	130½
.8	123½	124½	125	126	126½	127½	128½	129	130	131
.9	124	124½	125½	126	127	128	128½	129½	130½	131
38.0	124	125	126	126½	127½	128	129	130	130½	131½
.1	124½	125	126	127	128	128½	129½	130	131	132
.2	125	125½	126½	127	128	129	129½	130½	131½	132
.3	125	126	127	127½	128½	129	130	131	131½	132½
.4	125½	126½	127	128	128½	129½	130½	131	132	133
.5	126	126½	127½	128	129	130	131	131½	132½	133
.6	126	127	128	128½	129½	130	131	132	132½	133½
.7	126½	127	128	129	130	130½	131½	132	133	134
.8	127	127½	128½	129	130	131	131½	132½	133½	134
.9	127	128	129	129½	130½	131	132	133	134	134½
39.0	127½	128½	129	130	130½	131½	132½	133	134	135
.1	128	128½	129½	130	131	132	133	133½	134½	135
.2	128	129	129½	130½	131½	132	133	134	135	135½
.3	128½	129	130	131	132	132½	133½	134	135	136
.4	128½	129½	130½	131	132	133	134	134½	135½	136½
.5	129	130	131	131½	132½	133	134	135	136	136½
.6	129½	130	131	132	132½	133½	134½	135½	136	137
.7	129½	130½	131½	132	133	134	135	135½	136½	137½
.8	130	131	131½	132½	133½	134½	135	136	137	137½
.9	130½	131	132	133	133½	134½	135½	136½	137	138
40.0	130½	131½	132½	133	134	135	136	136½	137½	138½
.1	131	132	132½	133½	134½	135	136	137	138	139
.2	131½	132	133	134	135	135½	136½	137½	138	139
.3	131½	132½	133½	134	135	136	137	137½	138½	139½
.4	132	133	133½	134½	135½	136½	137	138	139	140
.5	132½	133	134	135	136	136½	137½	138½	139	140
.6	132½	133½	134½	135	136	137	138	138½	139½	140½
.7	133	134	134½	135½	136½	137	138	139	140	141
.8	133½	134	135	136	137	137½	138½	139½	140½	141
.9	133½	134½	135½	136	137	138	139	140	140½	141½

Lengths.	31. MEAN DIAMETERS.									
	31.0	.1	.2	.3	.4	.5	.6	.7	8.	.9
41.0	134	135	135½	136½	137½	138½	139	140	141	142
.1	134	135	136	137	138	138½	139½	140½	141½	142
.2	134½	135½	136½	137	138	139	140	141	141½	142½
.3	135	136	136½	137½	138½	139½	140	141	142	143
.4	135½	136	137	138	139	139½	140½	141½	142½	143
.5	135½	136½	137½	138	139	140	141	142	142½	143½
.6	136	137	137½	138½	139½	140½	141	142	143	144
.7	136	137	138	139	140	140½	141½	142½	143½	144
.8	136½	137½	138½	139	140	141	142	143	143½	144½
.9	137	138	138½	139½	140½	141½	142	143	144	145
42.0	137	138	139	140	141	141½	142½	143½	144½	145½
.1	137½	138½	139½	140	141	142	143	144	145	145½
.2	138	139	139½	140½	141½	142½	143½	144	145	146
.3	138	139	140	141	142	142½	143½	144½	145½	146½
.4	138½	139½	140½	141	142	143	144	145	146	146½
.5	139	140	140½	141½	142½	143½	144	145	146	147
.6	139	140	141	142	143	143½	144½	145½	146½	147½
.7	139½	140½	141½	142	143	144	145	146	147	148
.8	140	140½	141½	142½	143½	144½	145½	146	147	148
.9	140	141	142	143	144	145	145½	146½	147½	148½
43.0	140½	141½	142½	143	144	145	146	147	148	149
.1	141	142	142½	143½	144½	145½	146½	147	148	149
.2	141	142	143	144	145	145½	146½	147½	148½	149½
.3	141½	142½	143½	144	145	146	147	148	149	150
.4	142	142½	143½	144½	145½	146½	147½	148½	149	150
.5	142	143	144	145	146	147	147½	148½	149½	150½
.6	142½	143½	144½	145	146	147	148	149	150	151
.7	143	143½	144½	145½	146½	147½	148½	149	150	151
.8	143	144	145	146	147	148	148½	149½	150½	151½
.9	143½	144½	145	146	147	148	149	150	151	152
44.0	144	144½	145½	146½	147½	148½	149½	150½	151½	152
.1	144	145	146	147	148	149	150	150½	151½	152½
.2	144½	145½	146½	147	148	149	150	151	152	153
.3	145	145½	146½	147½	148½	149½	150½	151½	152½	153
.4	145	146	147	148	149	150	150½	151½	152½	153½
.5	145½	146½	147	148	149	150	151	152	153	154
.6	145½	146½	147½	148½	149½	150½	151½	152½	153½	154½
.7	146	147	148	149	150	151	152	153	153½	154½
.8	146½	147½	148½	149	150	151	152	153	154	155
.9	146½	148	148½	149½	150½	151½	152½	153½	154½	155

Lengths.	31. MEAN DIAMETERS.									
	31.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Lengths.	32. MEAN DIAMETERS.									
	32.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
35.0.....	122	122½	123½	124	125	125½	126½	127	128	129
.1.....	122	123	124	124½	125	126	127	127½	128½	129
.2.....	122½	123½	124	125	125½	126½	127	128	129	129½
.3.....	123	123½	124½	125	126	127	127½	128½	129	130
.4.....	123	124	125	125½	126½	127	128	128½	129½	130½
.5.....	123½	124½	125	126	127	127½	128	129	130	130½
.6.....	124	124½	125½	126½	127	128	128½	129½	130	131
.7.....	124	125	126	126½	127½	128	129	130	130½	131½
.8.....	124½	125½	126	127	128	128½	129½	130	131	132
.9.....	125	126	126½	127½	128	129	130	130½	131½	132
36.0.....	125½	126	127	127½	128½	129½	130	131	131½	132½
.1.....	125½	126½	127	128	129	129½	130½	131	132	133
.2.....	126	127	127½	128½	129	130	131	131½	132½	133
.3.....	126½	127	128	129	129½	130½	131	132	133	133½
.4.....	126½	127½	128½	129	130	130½	131½	132½	133	134
.5.....	127	128	128½	129½	130	131	132	133	133½	134½
.6.....	127½	128	129	130	130½	131½	132	133	134	134½
.7.....	128	128½	129½	130	131	132	132½	133½	134	135
.8.....	128	129	129½	130½	131½	132	133	134	134½	135½
.9.....	128½	129	130	131	132	132½	133½	134	135	136
37.0.....	129	129½	130½	131	132	133	133½	134½	135½	136
.1.....	129	130	131	131½	132½	133	134	135	136	136½
.2.....	129½	130½	131	132	133	133½	134½	135	136	137
.3.....	130	130½	131½	132½	133	134	135	135½	136½	137
.4.....	130	131	132	132½	133½	134½	135	136	137	137½
.5.....	130½	131½	132	133	134	134½	135½	136½	137	138
.6.....	131	131½	132½	133½	134	135	136	136½	137½	138½
.7.....	131	132	133	134	134½	135½	136	137	138	139
.8.....	131½	132½	133½	134	135	135½	136½	137½	138½	139
.9.....	132	133	133½	134½	135	136	137	138	138½	139½

Lengths.	32. MEAN DIAMETERS.									
	32.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
38.0	132½	133	134	135	135½	136½	137½	138	139	140
.1	132½	133½	134½	135	136	137	137½	138½	139⅛	140
.2	133	134	134½	135½	136½	137	138	139	139½	140½
.3	133½	134	135	136	137	137½	138½	139	140	141
.4	133½	134½	135½	136	137	138	139	139½	140½	141½
.5	134	135	136	136½	137½	138	139	140	141	141½
.6	134½	135	136	137	138	138½	139½	140½	141	142
.7	135	135½	136½	137	138	139	140	140½	141½	142½
.8	135	136	137	137½	138½	139½	140	141	142	143
.9	135½	136	137	138	139	140	140½	141½	142½	143
39.0	136	136½	137½	138½	139	140	141	142	142½	143½
.1	136	137	138	138½	139½	140½	141	142	143	144
.2	136½	137½	138	139	140	141	141½	142½	143½	144½
.3	137	137½	138½	139½	140	141	142	143	144	144½
.4	137	138	139	140	140½	141½	142½	143	144	145
.5	137½	138½	139	140	141	142	143	143½	144½	145½
.6	138	138½	139½	140½	141½	142	143	144	145	145½
.7	138	139	140	141	142	142½	143½	144½	145	146
.8	138½	139½	140½	141	142	143	144	144½	145½	146½
.9	139	140	140½	141½	142½	143	144	145	146	147
40.0	139½	140	141	142	143	143½	144½	145½	146½	147
.1	139½	140½	141½	142	143	144	145	146	146½	147½
.2	140	141	141½	142½	143½	144½	145½	146	147	148
.3	140½	141	142	143	144	145	145½	146½	147½	148
.4	140½	141½	142½	143½	144	145	146	147	148	148½
.5	141	142	143	143½	144½	145½	146½	147	148	149
.6	141½	142	143	144	145	146	146½	147½	148½	149½
.7	141½	142½	143½	144½	145	146	147	148	149	150
.8	142	143	144	144½	145½	146½	147½	148½	149	150½
.9	142½	143	144	145	146	147	148	149	149½	150½
41.0	142½	143½	144½	145½	146½	147	148	149	150	151
.1	143	144	145	146	146½	147½	148½	149½	150½	151
.2	143½	144½	145	146	147	148	149	150	150½	151½
.3	144	144½	145½	146½	147½	148½	149	150	151	152
.4	144	145	146	147	148	148½	149½	150½	151½	152½
.5	144½	145½	146½	147	148	149	150	151	152	153
.6	145	145½	146½	147½	148½	149½	150½	151	152	153
.7	145	146	147	148	149	150	150½	151½	152½	153½
.8	145½	146½	147½	148½	149	150	151	152	153	154
.9	146	147	148	148½	149½	150½	151½	152½	153	154

Lengths.	32. MEAN DIAMETERS.									
	32.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
42.0	146	147	148	149	150	151	152	152½	153½	154½
.1	146½	147½	148½	149½	150	151	152	153	154	155
.2	147	148	149	149½	150½	151½	152½	153½	154½	155½
.3	147	148	149	150	151	152	153	154	155	155½
.4	147½	148½	149½	150½	151½	152½	153	154	155	156
.5	148	149	150	151	151½	152½	153½	154½	155½	156½
.6	148½	149	150	151	152	153	154	155	156	157
.7	148½	149½	150½	151½	152½	153½	154½	155	156	157
.8	149	150	151	152	153	153½	154½	155½	156½	157½
.9	149½	150	151	152	153	154	155	156	157	158
43.0	149½	150½	151½	152½	153½	154½	155½	156½	157½	158
.1	150	151	152	153	154	155	156	156½	157½	158½
.2	150½	151½	152½	153	154	155	156	157	158	159
.3	151	152	152½	153½	154½	155½	156½	157½	158½	159½
.4	151	152	153	154	155	156	157	158	159	159½
.5	151½	152½	153½	154½	155	156	157	158	159	160
.6	152	152½	153½	154½	155½	156½	157½	158½	159½	160½
.7	152	153	154	155	156	157	158	159	160	161
.8	152½	153½	154½	155½	156½	157½	158½	159	160	161
.9	153	154	155	156	156½	157½	158½	159½	160½	161½
44.0	153	154	155	156	157	158	159	160	161	162
.1	153½	154½	155½	156½	157½	158½	159½	160½	161½	162
.2	154	155	156	157	158	158½	159½	160½	161½	162½
.3	154	155	156	157	158	159	160	161	162	163
.4	154½	155½	156½	157½	158½	159½	160½	161½	162½	163½
.5	155	156	157	158	159	160	161	162	163	164
.6	155½	156½	157	158	159	160	161	162	163	164
.7	155½	156½	157½	158½	159½	160½	161½	162½	163½	164½
.8	156	157	158	159	160	161	162	163	164	165
.9	156½	157½	158	159	160	161	162	163	164	165
45.0	156½	157½	158½	159½	160½	161½	162½	163½	164½	165½
.1	157	158	159	160	161	162	163	164	165	166
.2	157½	158½	159½	160½	161½	162½	163½	164½	165½	166½
.3	158	159	159½	160½	161½	162½	163½	164½	165½	166½
.4	158	159	160	161	162	163	164	165	166	167
.5	158½	159½	160½	161½	162½	163½	164½	165½	166½	167½
.6	159	160	161	161½	163	164	165	166	167	168
.7	159	160	161	162	163	164	165	166	167	168
.8	159½	160½	161½	162½	163½	164½	165½	166½	167½	168½
.9	160	161	162	163	164	165	166	167	168	169

Lengths.	32. MEAN DIAMETERS.									
	32.0	.1	.2	.3	.4	.5	.6	.7	.8	.9

Lengths.	33. MEAN DIAMETERS.									
	33.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
36.0	133½	134	135	135½	136½	137½	138	139	140	140½
.1	133½	134½	135½	136	137	138	138½	139½	140	141
.2	134	135	135½	136½	137½	138	139	140	140½	141½
.3	134½	135	136	137	137½	138½	139½	140	141	142
.4	135	135½	136½	137	138	139	139½	140½	141½	142
.5	135	136	137	137½	138½	139½	140	141	142	142½
.6	135½	136½	137	138	139	139½	140½	141½	142	143
.7	136	136½	137½	138½	139	140	141	141½	142½	143½
.8	136½	137	138	138½	139½	140½	141½	142	143	144
.9	137	137½	138½	139	140	141	142	142½	143½	144
37.0	137	138	138½	139½	140½	141	142	143	143½	144½
.1	137½	138	139	140	140½	141½	142½	143	144	145
.2	137½	138½	139½	140½	141	142	143	143½	144½	145½
.3	138	139	140	140½	141½	142½	143	144	145	145½
.4	138½	139½	140	141	142	142½	143½	144½	145½	146
.5	139	139½	140½	141½	142	143	144	145	145½	146½
.6	139	140	141	142	142½	143½	144½	145	146	147
.7	139½	140½	141½	142	143	144	144½	145½	146½	147½
.8	140	141	141½	142½	143½	144	145	146	147	147½
.9	140½	141	142	143	144	144½	145½	146½	147	148
38.0	140½	141½	142½	143½	144	145	146	146½	147½	148½
.1	141	142	143	143½	144½	145½	146	147	148	149
.2	141½	142½	143	144	145	146	146½	147½	148½	149½
.3	142	142½	143½	144½	145	146	147	148	148½	149½
.4	142	143	144	145	145½	146½	147½	148½	149	150
.5	142½	143½	144½	145	146	147	148	148½	149½	150½
.6	143	144	144½	145½	146½	147½	148	149	150	151
.7	143½	144	145	146	147	147½	148½	149½	150½	151
.8	143½	144½	145½	146½	147	148	149	150	150½	151½
.9	144	145	146	147	147½	148½	149½	150	151	152

Lengths.	33. MEAN DIAMETERS.									
	33.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
39.0	144½	145½	146	147	148	149	149½	150½	151½	152½
.1	145	145½	146½	147½	148½	149	150	151	152	153
.2	145	146	147	148	148½	149½	150½	151½	152½	153
.3	145½	146½	147½	148	149	150	151	152	153	153½
.4	146	147	147½	148½	149½	150½	151	152	153	154
.5	146	147	148	149	150	150½	151½	152½	153½	154½
.6	146½	147½	148½	149½	150	151	152	153	154	154½
.7	147	148	149	149½	150½	151½	152½	153½	154	155
.8	147½	148	149	150	151	152	153	153½	154½	155½
.9	148	148½	149½	150½	151½	152	153	154	155	156
40.0	148	149	150	151	151½	152½	153½	154½	155½	156½
.1	148½	149½	150½	151	152	153	154	155	156	156½
.2	149	149½	150½	151½	152½	153½	154½	155	156	157
.3	149	150	151	152	153	154	154½	155½	156½	157½
.4	149½	150½	151½	152½	153	154	155	156	157	158
.5	150	151	152	152½	153½	154½	155½	156½	157½	158
.6	150½	151	152	153	154	155	156	157	157½	158½
.7	150½	151½	152½	153½	154½	155½	156	157	158	159
.8	151	152	153	154	155	155½	156½	157½	158½	159½
.9	151½	152½	153½	154	155	156	157	158	159	160
41.0	152	152½	153½	154½	155½	156½	157½	158½	159½	160
.1	152	153	154	155	156	157	158	159	159½	160½
.2	152½	153½	154½	155½	156½	157	158	159	160	161
.3	153	154	155	155½	156½	157½	158½	159½	160½	161½
.4	153½	154	155	156	157	158	159	160	161	162
.5	153½	154½	155½	156½	157½	158½	159½	160½	161	162
.6	154	155	156	157	158	158½	159½	160½	161½	162½
.7	154½	155½	156	157	158	159	160	161	162	163
.8	155	155½	156½	157½	158½	159½	160½	161½	162½	163½
.9	155	156	157	158	159	160	161	162	163	163½
42.0	155½	156½	157½	158½	159½	160½	161	162	163	164
.1	156	157	158	158½	159½	160½	161½	162½	163½	164½
.2	156	157	158	159	160	161	162	163	164	165
.3	156½	157½	158½	159½	160½	161½	162½	163½	164½	165½
.4	157	157½	159	160	161	162	163	163½	164½	165½
.5	157½	158	159	160	161	162	163	164	165	166
.6	157½	158½	159½	160½	161½	162½	163½	164½	165½	166½
.7	158	159	160	161	162	163	164	165	166	167
.8	158½	159½	160½	161½	162½	163½	164½	165½	166	167
.9	159	160	161	162	162½	164	165	165½	166½	167½

Lengths.	33. MEAN DIAMETERS.									
	33.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
43.0	159	160	161	162	163	164	165	166	167	168
.1	159½	160½	161½	162½	163½	164½	165½	166½	167½	168½
.2	160	161	162	163	164	165	166	167	168	169
.3	160½	161½	162	163	164	165	166	167	168	169
.4	160½	161½	162½	163½	164½	165½	166½	167½	168½	169½
.5	161	162	163	164	165	166	167	168	169	170
.6	161½	162½	163½	164½	165½	166½	167½	168½	169½	170½
.7	162	163	164	165	166	167	168	169	170	171
.8	162	163	164	165	166	167	168	169	170	171
.9	162½	163½	164½	165½	166½	167½	168½	169½	170½	171½
44.0	163	164	165	166	167	168	169	170	171	172
.1	163½	164	165	166	167	168½	169½	170½	171½	172½
.2	163½	164½	165½	166½	167½	168½	169½	170½	171½	172½
.3	164	165	166	167	168	169	170	171	172	173
.4	164½	165½	166½	167½	168½	169½	170½	171½	172½	173½
.5	165	166	167	168	169	170	171	172	173	174
.6	165	166	167	168	169	170	171	172	173	174½
.7	165½	166½	167½	168½	169½	170½	171½	172½	173½	174½
.8	166	167	168	169	170	171	172	173	174	175
.9	166	167	168	169½	170½	171½	172½	173½	174½	175½
45.0	166½	167½	168½	169½	170½	171½	172½	174	175	176
.1	167	168	169	170	171	172	173	174	175	176
.2	167½	168½	169½	170½	171½	172½	173½	174½	175½	176½
.3	168	169	170	171	172	173	174	175	176	177
.4	168	169	170	171	172	173	174½	175½	176½	177½
.5	168½	169½	170½	171½	172½	173½	174½	175½	176½	178
.6	169	170	171	172	173	174	175	176	177	178
.7	169	170	171	172½	173½	174½	175½	176½	177½	178½
.8	169½	170½	171½	172½	173½	175	176	177	178	179
.9	170	171	172	173	174	175	176	177	178½	179½
46.0	170½	171½	172½	173½	174½	175½	176½	177½	178½	179½
.1	170½	172	173	174	175	176	177	178	179	180
.2	171	172	173	174	175	176½	177½	178½	179½	180½
.3	171½	172½	173½	174½	175½	176½	177½	179	180	181
.4	172	173	174	175	176	177	178	179	180	181½
.5	172	173	174	175½	176½	177½	178½	179½	180½	181½
.6	172½	173½	174½	175½	176½	178	179	180	181	182
.7	173	174	175	176	177	178	179	180½	181½	182½
.8	173½	174½	175½	176½	177½	178½	179½	180½	182	183
.9	174	174½	176	177	178	179	180	181	182	183½

Lengths.	33. MEAN DIAMETERS.									
	33.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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Lengths.	34. MEAN DIAMETERS.									
	34.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
37.0.....	145½	146½	147	148	149	149½	150½	151½	152½	153
.1.....	146	146½	147½	148½	149½	150	151	152	152½	153½
.2.....	146	147	148	149	149½	150½	151½	152½	153	154
.3.....	146½	147½	148½	149	150	151	152	152½	153½	154½
.4.....	147	148	148½	149½	150½	151½	152	153	154	155
.5.....	147½	148½	149	150	151	152	152½	153½	154½	155½
.6.....	148	148½	149½	150½	151½	152	153	154	155	155½
.7.....	148	149	150	151	151½	152½	153½	154½	155	156
.8.....	148½	149½	150½	151	152	153	154	154½	155½	156½
.9.....	149	150	150½	151½	152½	153½	154½	155	156	157
38.0.....	149½	150	151	152	153	154	154½	155½	156½	157½
.1.....	150	150½	151½	152½	153½	154	155	156	157	158
.2.....	150	151	152	153	153½	154½	155½	156½	157½	158
.3.....	150½	151½	152½	153	154	155	156	157	157½	158½
.4.....	151	152	152½	153½	154½	155½	156½	157	158	159
.5.....	151½	152	153	154	155	156	156½	157½	158½	159½
.6.....	151½	152½	153½	154½	155½	156	157	158	159	160
.7.....	152	153	154	155	155½	156½	157½	158½	159½	160½
.8.....	152½	153½	154½	155	156	157	158	159	160	160½
.9.....	153	154	154½	155½	156½	157½	158½	159	160	161
39.0.....	153½	154	155	156	157	158	158½	159½	160½	161½
.1.....	153½	154½	155½	156½	157½	158	159	160	161	162
.2.....	154	155	156	157	157½	158½	159½	160½	161½	162½
.3.....	154½	155½	156½	157	158	159	160	161	162	162½
.4.....	155	156	156½	157½	158½	159½	160½	161½	162	163
.5.....	155	156	157	158	159	160	161	161½	162½	163½
.6.....	155½	156½	157½	158½	159½	160½	161	162	163	164
.7.....	156	157	158	159	159½	160½	161½	162½	163½	164½
.8.....	156½	157½	158½	159	160	161	162	163	164	165
.9.....	157	158	158½	159½	160½	161½	162½	163½	164½	165

Lengths.	34. MEAN DIAMETERS.									
	34.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
40.0	157	158	159	160	161	162	163	164	164½	165½
.1	157½	158½	159½	160½	161½	162½	163	164	165	166
.2	158	159	160	161	161½	162½	163½	164½	165½	166½
.3	158½	159½	160½	161	162	163	164	165	166	167
.4	159	159½	160½	161½	162½	163½	164½	165½	166½	167½
.5	159	160	161	162	163	164	165	166	166½	167½
.6	159½	160½	161½	162½	163½	164½	165½	166	167	168
.7	160	161	162	163	164	164½	165½	166½	167½	168½
.8	160½	161½	162½	163	164	165	166	167	168	169
.9	161	161½	162½	163½	164½	165½	166½	167½	168½	169½
41.0	161	162	163	164	165	166	167	168	169	170
.1	161½	162½	163½	164½	165½	166½	167½	168½	169	170
.2	162	163	164	165	166	166½	167½	168½	169½	170½
.3	162½	163½	164	165	166	167	168	169	170	171
.4	162½	163½	164½	165½	166½	167½	168½	169½	170½	171½
.5	163	164	165	166	167	168	169	170	171	172
.6	163½	164½	165½	166½	167½	168½	169½	170½	171½	172½
.7	164	165	166	167	168	168½	169½	170½	171½	172½
.8	164½	165½	166	167	168	169	170	171	172	173
.9	164½	165½	166½	167½	168½	169½	170½	171½	172½	173½
42.0	165	166	167	168	169	170	171	172	173	174
.1	165½	166½	167½	168½	169½	170½	171½	172½	173½	174½
.2	166	167	168	169	170	171	172	173	174	175
.3	166	167	168	169	170	171	172	173	174	175
.4	166½	167½	168½	169½	170½	171½	172½	173½	174½	175½
.5	167	168	169	170	171	172	173	174	175	176
.6	167½	168½	169½	170½	171½	172½	173½	174½	175½	176½
.7	168	169	170	171	172	172	174	175	176	177
.8	168	169	170	171	172	173	174	175	176	177
.9	168½	169½	170½	171½	172½	173½	174½	175½	176½	177½

TABLE No. II.

FOR FINDING THE PROOF-GALLONS.

The wine-gallons and the true per cent. having been found, beneath the first, on the upper margin, and opposite the last, on the left-hand margin, will be found the proof-gallons.

The use of the sliding scale to find the wine-gallons from the mean diameter and length by gaugers who prefer its use, is not prohibited; but such finding must be verified in every instance by the foregoing table, or Table No. I.

True per cent. of proof.	WINE-GALLONS.							
	1	1½	2	2½	3	3½	4	4½
40	0.40	0.60	0.80	1.00	1.20	1.40	1.60	1.80
41	0 41	0.61	0.82	1.02	1.23	1.43	1.64	1.84
42	0.42	0.63	0.84	1.05	1.26	1.47	1.68	1.89
43	0.43	0.64	0.86	1.07	1.29	1.50	1.72	1.93
44	0.44	0.66	0.88	1.10	1.32	1.54	1.76	1.98
45	0.45	0.67	0.90	1.12	1.35	1.57	1.80	2.02
46	0.46	0.69	0.92	1.15	1.38	1.61	1.84	2.07
47	0.47	0.70	0.94	1.17	1.41	1.64	1.88	2.11
48	0.48	0.72	0.96	1.20	1.44	1.68	1.92	2.16
49	0.49	0.73	0.98	1.22	1.47	1.71	1.96	2.20
50	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25
51	0.51	0.76	1.02	1.27	1.53	1.78	2.04	2.29
52	0.52	0.78	1.04	1.30	1.56	1.82	2.08	2.34
53	0.53	0.79	1.06	1.32	1.59	1.85	2.12	2.38
54	0.54	0.81	1.08	1.35	1.62	1.89	2.16	2.43
55	0.55	0.82	1.10	1.37	1.65	1.92	2.20	2.47
56	0.56	0.84	1.12	1.40	1.68	1.96	2.24	2.52
57	0.57	0.85	1.14	1.42	1.71	1.99	2.28	2.56
58	0.58	0.87	1.16	1.45	1.74	2.03	2.32	2.61
59	0.59	0.88	1.18	1.47	1.77	2.06	2.36	2.65
60	0.60	0.90	1.20	1.50	1.80	2.10	2.40	2.70
61	0.61	0.91	1.22	1.52	1.83	2.13	2.44	2.74
62	0.62	0.93	1.24	1.55	1.86	2.17	2.48	2.79
63	0.63	0.94	1.26	1.57	1.89	2.20	2.52	2.83
64	0.64	0.96	1.28	1.60	1.92	2.24	2.56	2.88
65	0.65	0.97	1.30	1.62	1.95	2.27	2.60	2.92
66	0.66	0.99	1.32	1.65	1.98	2.31	2.64	2.97
67	0.67	1.00	1.34	1.67	2.01	2.34	2.68	3.01
68	0.68	1.02	1.36	1.70	2.04	2.38	2.72	3.06
69	0.69	1.03	1.38	1.72	2.07	2.41	2.76	3.10
70	0.70	1.05	1.40	1.75	2.10	2.45	2.80	3.15
71	0.71	1.06	1.42	1.77	2.13	2.48	2.84	3.19
72	0.72	1.08	1.44	1.80	2.16	2.52	2.88	3.24
73	0.73	1.09	1.46	1.82	2.19	2.55	2.92	3.28
74	0.74	1.11	1.48	1.85	2.22	2.59	2.96	3.33
75	0.75	1.12	1.50	1.87	2.25	2.62	3.00	3.37
76	0.76	1.14	1.52	1.90	2.28	2.66	3.04	3.42
77	0.77	1.15	1.54	1.92	2.31	2.69	3.08	3.46
78	0.78	1.17	1.56	1.95	2.34	2.73	3.12	3.51
79	0.79	1.18	1.58	1.97	2.37	2.76	3.16	3.55
80	0.80	1.20	1.60	2.00	2.40	2.80	3.20	3.60
81	0.81	1.21	1.62	2.02	2.43	2.83	3.24	3.64
82	0.82	1.23	1.64	2.05	2.46	2.87	3.28	3.69
83	0.83	1.24	1.66	2.07	2.49	2.90	3.32	3.73
84	0.84	1.26	1.68	2.10	2.52	2.94	3.36	3.78
85	0.85	1.27	1.70	2.12	2.55	2.97	3.40	3.82

True per cent. of proof.	WINE-GALLONS.							
	1	1½	2	2½	3	3½	4	4½
86...	0.86	1.29	1.72	2.15	2.58	3.01	3.44	3.87
87...	0.87	1.30	1.74	2.17	2.61	3.04	3.48	3.91
88...	0.88	1.32	1.76	2.20	2.64	3.08	3.52	3.96
89...	0.89	1.33	1.78	2.22	2.67	3.11	3.56	4.00
90...	0.90	1.35	1.80	2.25	2.70	3.15	3.60	4.05
91...	0.91	1.36	1.82	2.27	2.73	3.18	3.64	4.09
92...	0.92	1.38	1.84	2.30	2.76	3.22	3.68	4.14
93...	0.93	1.39	1.86	2.32	2.79	3.25	3.72	4.18
94...	0.94	1.41	1.88	2.35	2.82	3.29	3.76	4.23
95...	0.95	1.42	1.90	2.37	2.85	3.32	3.80	4.27
96...	0.96	1.44	1.92	2.40	2.88	3.36	3.84	4.32
97...	0.97	1.45	1.94	2.42	2.91	3.39	3.88	4.36
98...	0.98	1.47	1.96	2.45	2.94	3.43	3.92	4.41
99...	0.99	1.48	1.98	2.47	2.97	3.46	3.96	4.45
100...	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
101...	1.01	1.51	2.02	2.52	3.03	3.53	4.04	4.54
102...	1.02	1.53	2.04	2.55	3.06	3.57	4.08	4.59
103...	1.03	1.54	2.06	2.57	3.09	3.60	4.12	4.63
104...	1.04	1.56	2.08	2.60	3.12	3.64	4.16	4.68
105...	1.05	1.57	2.10	2.62	3.15	3.67	4.20	4.72
106...	1.06	1.59	2.12	2.65	3.18	3.71	4.24	4.77
107...	1.07	1.60	2.14	2.67	3.21	3.74	4.28	4.81
108...	1.08	1.62	2.16	2.70	3.24	3.78	4.32	4.86
109...	1.09	1.63	2.18	2.72	3.27	3.81	4.36	4.90
110...	1.10	1.65	2.20	2.75	3.30	3.85	4.40	4.95
111...	1.11	1.66	2.22	2.77	3.33	3.88	4.44	4.99
112...	1.12	1.68	2.24	2.80	3.36	3.92	4.48	5.04
113...	1 13	1.69	2.26	2.82	3.39	3.95	4.52	5.08
114...	1.14	1.71	2.28	2.85	3.42	3.99	4.56	5.13
115...	1.15	1.72	2.30	2.87	3.45	4.02	4.60	5.17
116...	1.16	1.74	2.32	2.90	3.48	4.06	4.64	5.22
117...	1.17	1.75	2.34	2.92	3.51	4.09	4.68	5.26
118...	1.18	1.77	2.36	2.95	3.54	4.13	4.72	5.31
119...	1.19	1.78	2.38	2.97	3.57	4.16	4.76	5.35
120...	1.20	1.80	2.40	3.00	3.60	4.20	4.80	5.40
121...	1.21	1.81	2.42	3.02	3.63	4.23	4.84	5.44
122...	1.22	1.83	2.44	3.05	3.66	4.27	4.88	5.49
123...	1.23	1.84	2.46	3.07	3.69	4.30	4.92	5.53
124...	1.24	1.86	2.48	3.10	3.72	4.34	4.96	5.58
125...	1.25	1.87	2.50	3.12	3.75	4.37	5.00	5.62
126...	1.26	1.89	2.52	3.15	3.78	4.41	5.04	5.67
127...	1.27	1.90	2.54	3.17	3.81	4.44	5.08	5.71
128...	1.28	1.92	2.56	3.20	3.84	4.48	5.12	5.76
129...	1.29	1.93	2.58	3.22	3.87	4.51	5.16	5.80
130...	1.30	1.95	2.60	3.25	3.90	4.55	5.20	5.85
131...	1.31	1.96	2.62	3.27	3.93	4.58	5.24	5.89

True per cent. of proof.	WINE-GALLONS.							
	1	1½	2	2½	3	3½	4	4½
132...	1.32	1.98	2.64	3.30	3.96	4.62	5.28	5.94
133...	1.33	1.99	2.66	3.32	3.99	4.65	5.32	5.98
134...	1.34	2.01	2.68	3.35	4.02	4.69	5.36	6.03
135...	1.35	2.02	2.70	3.37	4.05	4.72	5.40	6.07
136...	1.36	2.04	2.72	3.40	4.08	4.76	5.44	6.12
137...	1.37	2.05	2.74	3.42	4.11	4.79	5.48	6.16
138...	1.38	2.07	2.76	3.45	4.14	4.83	5.52	6.21
139...	1.39	2.08	2.78	3.47	4.17	4.86	5.56	6.25
140...	1.40	2.10	2.80	3.50	4.20	4.90	5.60	6.30
141...	1.41	2.11	2.82	3.52	4.23	4.93	5.64	6.34
142...	1.42	2.13	2.84	3.55	4.26	4.97	5.68	6.39
143...	1.43	2.14	2.86	3.57	4.29	5.00	5.72	6.43
144...	1.44	2.16	2.88	3.60	4.32	5.04	5.76	6.48
145...	1.45	2.17	2.90	3.62	4.35	5.07	5.80	6.52
146...	1.46	2.19	2.92	3.65	4.38	5.11	5.84	6.57
147...	1.47	2.20	2.94	3.67	4.41	5.14	5.88	6.61
148...	1.48	2.22	2.96	3.70	4.44	5.18	5.92	6.66
149...	1.49	2.23	2.98	3.72	4.47	5.21	5.96	6.70
150...	1.50	2.25	3.00	3.75	4.50	5.25	6.00	6.75
151...	1.51	2.26	3.02	3.77	4.53	5.28	6.04	6.79
152...	1.52	2.28	3.04	3.80	4.56	5.32	6.08	6.84
153...	1.53	2.29	3.06	3.82	4.59	5.35	6.12	6.88
154...	1.54	2.31	3.08	3.85	4.62	5.39	6.16	6.93
155...	1.55	2.32	3.10	3.87	4.65	5.42	6.20	6.97
156...	1.56	2.34	3.12	3.90	4.68	5.46	6.24	7.02
157...	1.57	2.35	3.14	3.92	4.71	5.49	6.28	7.06
158...	1.58	2.37	3.16	3.95	4.74	5.53	6.32	7.11
159...	1.59	2.38	3.18	3.97	4.77	5.56	6.36	7.15
160...	1.60	2.40	3.20	4.00	4.80	5.60	6.40	7.20

True per cent. of proof.	WINE-GALLONS.							
	5	5½	6	6½	7	7½	8	8½
40	2.00	2.20	2.40	2.60	2.80	3.00	3.20	3.40
41	2.05	2.25	2.46	2.66	2.87	3.07	3.28	3.48
42	2.10	2.31	2.52	2.73	2.94	3.15	3.36	3.57
43	2.15	2.36	2.58	2.79	3.01	3.22	3.44	3.65
44	2.20	2.42	2.64	2.86	3.08	3.30	3.52	3.74
45	2.25	2.47	2.70	2.92	3.15	3.37	3.60	3.82
46	2.30	2.53	2.76	2.99	3.22	3.45	3.68	3.91
47	2.35	2.58	2.82	3.05	3.29	3.52	3.76	3.99
48	2.40	2.64	2.88	3.12	3.36	3.60	3.84	4.08
49	2.45	2.69	2.94	3.18	3.43	3.67	3.92	4.16
50	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25
51	2.55	2.80	3.06	3.31	3.57	3.82	4.08	4.33
52	2.60	2.86	3.12	3.38	3.64	3.90	4.16	4.42
53	2.65	2.91	3.18	3.44	3.71	3.97	4.24	4.50
54	2.70	2.97	3.24	3.51	3.78	4.05	4.32	4.59
55	2.75	3.02	3.30	3.57	3.85	4.12	4.40	4.67
56	2.80	3.08	3.36	3.64	3.92	4.20	4.48	4.76
57	2.85	3.13	3.42	3.70	3.99	4.27	4.56	4.84
58	2.90	3.19	3.48	3.77	4.06	4.35	4.64	4.93
59	2.95	3.24	3.54	3.83	4.13	4.42	4.72	5.01
60	3.00	3.30	3.60	3.90	4.20	4.50	4.80	5.10
61	3.05	3.35	3.66	3.97	4.27	4.57	4.88	5.18
62	3.10	3.41	3.72	4.03	4 34	4.65	4.96	5.27
63	3.15	3.46	3.78	4.10	4.41	4.72	5.04	5.35
64	3.20	3.52	3.84	4.16	4.48	4.80	5.12	5.44
65	3.25	3.57	3.90	4.23	4.55	4.87	5.20	5.52
66	3.30	3.63	3.96	4.29	4.62	4.95	5.28	5.61
67	3.35	3.68	4.02	4.36	4.69	5.02	5.36	5.69
68	3.40	3.74	4.08	4.42	4.76	5.10	5.44	5.78
69	3.45	3.79	4.14	4.49	4.83	5.17	5.52	5.86
70	3.50	3.85	4.20	4.55	4.90	5.25	5.60	5.95
71	3.55	3.90	4.26	4.61	4.97	5.32	5.68	6.03
72	3.60	3.96	4.32	4.68	5.04	5.40	5.76	6.12
73	3.65	4.01	4.38	4.74	5.11	5.47	5.84	6.20
74	3.70	4.07	4.44	4.81	5.18	5.55	5.92	6.29
75	3.75	4.12	4.50	4.87	5.25	5.62	6.00	6.37
76	3.80	4.18	4.56	4.94	5.32	5.70	6.08	6.46
77	3.85	4.23	4.62	5.00	5.39	5.77	6.16	6.54
78	3.90	4.29	4.68	5.07	5.46	5.85	6.24	6.63
79	3.95	4.34	4.74	5.13	5.53	5.92	6.32	6.71
80	4.00	4.40	4.80	5.20	5.60	6.00	6.40	6.80
81	4.05	4.45	4.86	5.26	5.67	6.07	6.48	6.88
82	4.10	4.51	4.92	5.33	5.74	6.15	6.56	6.97
83	4.15	4.56	4.98	5.39	5.81	6.22	6.64	7.05
84	4.20	4.62	5.04	5.46	5.88	6.30	6.72	7.14
85	4.25	4.67	5.10	5.52	5.95	6.37	6.80	7.22

True per cent. of proof.	WINE-GALLONS.							
	5	5½	6	6½	7	7½	8	8½
86...	4.30	4.73	5.16	5.59	6.02	6.45	6.88	7.31
87...	4.35	4.79	5.22	5.65	6.09	6.52	6.96	7.39
88...	4.40	4.84	5.28	5.72	6.16	6.60	7.04	7.48
89...	4.45	4.90	5.34	5.78	6.23	6.67	7.12	7.56
90...	4.50	4.95	5.40	5.85	6.30	6.75	7.20	7.65
91...	4.55	5.01	5.46	5.91	6.37	6.82	7.28	7.73
92...	4.60	5.06	5.52	5.98	6.44	6.90	7.36	7.82
93...	4.65	5.12	5.58	6.04	6.51	6.97	7.44	7.90
94...	4.70	5.17	5.64	6.11	6.58	7.05	7.52	7.99
95...	4.75	5.23	5.70	6.17	6.65	7.12	7.60	8.07
96...	4.80	5.28	5.76	6.24	6.72	7.20	7.68	8.16
97...	4.85	5.33	5.82	6.30	6.79	7.27	7.76	8.24
98...	4.90	5.39	5.88	6.37	6.86	7.35	7.84	8.33
99...	4.95	5.44	5.94	6.43	6.93	7.42	7.92	8.41
100...	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50
101...	5.05	5.55	6.06	6.56	7.07	7.57	8.08	8.58
102...	5.10	5.61	6.12	6.63	7.14	7.65	8.16	8.67
103...	5.15	5.66	6.18	6.69	7.21	7.72	8.24	8.75
104...	5.20	5.72	6.24	6.76	7.28	7.80	8.32	8.84
105...	5.25	5.77	6.30	6.82	7.35	7.87	8.40	8.92
106...	5.30	5.83	6.36	6.89	7.42	7.95	8.48	9.01
107...	5.35	5.88	6.42	6.95	7.49	8.02	8.56	9.09
108...	5.40	5.94	6.48	7.02	7.56	8.10	8.64	9.18
109...	5.45	5.99	6.54	7.08	7.63	8.17	8.72	9.26
110...	5.50	6.05	6.60	7.15	7.70	8.25	8.80	9.35
111...	5.55	6.10	6.66	7.21	7.77	8.32	8.88	9.43
112...	5.60	6.16	6.72	7.28	7.84	8.40	8.96	9.52
113...	5.65	6.21	6.78	7.34	7.91	8.47	9.04	9.60
114...	5.70	6.27	6.84	7.41	7.98	8.55	9.12	9.69
115...	5.75	6.32	6.90	7.47	8.05	8.62	9.20	9.77
116...	5.80	6.38	6.96	7.54	8.12	8.70	9.28	9.86
117...	5.85	6.43	7.02	7.60	8.19	8.77	9.36	9.94
118...	5.90	6.49	7.08	7.67	8.26	8.85	9.44	10.03
119...	5.95	6.54	7.14	7.73	8.33	8.92	9.52	10.11
120...	6.00	6.60	7.20	7.80	8.40	9.00	9.60	10.20
121...	6.05	6.65	7.26	7.86	8.47	9.07	9.68	10.28
122...	6.10	6.71	7.32	7.93	8.54	9.15	9.76	10.37
123...	6.15	6.76	7.38	7.99	8.61	9.22	9.84	10.45
124...	6.20	6.82	7.44	8.06	8.68	9.30	9.92	10.54
125...	6.25	6.87	7.50	8.12	8.75	9.37	10.00	10.62
126...	6.30	6.93	7.56	8.19	8.82	9.45	10.08	10.71
127...	6.35	6.98	7.62	8.25	8.89	9.52	10.16	10.79
128...	6.40	7.04	7.68	8.32	8.96	9.60	10.24	10.88
129...	6.45	7.09	7.74	8.38	9.03	9.67	10.32	10.96
130...	6.50	7.15	7.80	8.45	9.10	9.75	10.40	11.05
131...	6.55	7.20	7.86	8.51	9.17	9.82	10.48	11.13

True per cent. of proof.	WINE-GALLONS.							
	5	5½	6	6½	7	7½	8	8½
132...	6.60	7.26	7.92	8.58	9.24	9.90	10.56	11.22
133...	6.65	7.31	7.98	8.64	9.31	9.97	10.64	11.30
134...	6.70	7.37	8.04	8.71	9.38	10.05	10.72	11.39
135...	6.75	7.42	8.10	8.77	9.45	10.12	10.80	11.47
136...	6.80	7.48	8.16	8.84	9.52	10.20	10.88	11.56
137...	6.85	7.53	8.22	8.90	9.59	10.27	10.96	11.64
138...	6.90	7.59	8.28	8.97	9.66	10.35	11.04	11.73
139...	6.95	7.64	8.34	9.03	9.73	10.42	11.12	11.81
140...	7.00	7.70	8.40	9.10	9.80	10.50	11.20	11.90
141...	7.05	7.75	8.46	9.16	9.87	10.57	11.28	11.98
142...	7.10	7.81	8.52	9.23	9.94	10.65	11.36	12.07
143...	7.15	7.86	8.58	9.29	10.01	10.72	11.44	12.15
144...	7.20	7.92	8.64	9.36	10.08	10.80	11.52	12.24
145...	7.25	7.97	8.70	9 42	10.15	10.87	11.60	12.32
146...	7.30	8.03	8.76	9.49	10.22	10.95	11.68	12.41
147...	7.35	8.08	8.82	9.55	10.29	11.02	11.76	12.49
148...	7.40	8.14	8.88	9.62	10.36	11.10	11.84	12.58
149...	7.45	8.19	8.94	9.68	10.43	11.17	11.92	12.66
150...	7.50	8.25	9.00	9.75	10.50	11.25	12.00	12.75
151...	7.55	8.30	9.06	9.81	10.57	11.32	12.08	12.83
152...	7.60	8.36	9.12	9.88	10.64	11.40	12.16	12.92
153...	7.65	8.41	9.18	9.94	10.71	11.47	12.24	13.00
154...	7.70	8.47	9.24	10.01	10.78	11.55	12.32	13.09
155...	7.75	8.52	9.30	10.07	10.85	11.62	12.40	13.17
156...	7.80	8.58	9.36	10.14	10.92	11.70	12.48	13.26
157...	7.85	8.63	9.42	10.20	10.99	11.77	12.56	13.34
158...	7.90	8.69	9.48	10.27	11.06	11.85	12.64	13.43
159...	7.95	8.74	9.54	10.33	11.13	11.92	12.72	13.51
160...	8.00	8.80	9.60	10.40	11.20	12.00	12.80	13.60

True per cent. of proof.	WINE-GALLONS.							
	9	9½	10	10½	11	11½	12	12½
40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00
41	3.69	3.89	4.10	4.30	4.51	4.71	4.92	5.12
42	3.78	3.99	4.20	4.41	4.62	4.83	5.04	5.25
43	3.87	4.08	4.30	4.51	4.73	4.94	5.16	5.37
44	3.96	4.18	4.40	4.62	4.84	5.06	5.28	5.50
45	4.05	4.27	4.50	4.72	4.95	5.17	5.40	5.62
46	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
47	4.23	4.46	4.70	4.93	5.17	5.40	5.64	5.87
48	4.32	4.56	4.80	5.04	5.28	5.52	5.76	6.00
49	4.41	4.65	4.90	5.14	5.39	5.63	5.88	6.12
50	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25
51	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
52	4.68	4.94	5.20	5.46	5.72	5.98	6.24	6.50
53	4.77	5.03	5.30	5.56	5.83	6.09	6.36	6.62
54	4.86	5.13	5.40	5.67	5.94	6.21	6.48	6.75
55	4.95	5.22	5.50	5.77	6.05	6.32	6.60	6.87
56	5.04	5.32	5.60	5.88	6.16	6.44	6.72	7.00
57	5.13	5.41	5.70	5.98	6.27	6.55	6.84	7.12
58	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
59	5.31	5.60	5.90	6.19	6.49	6.78	7.08	7.37
60	5.40	5.70	6.00	6.30	6.60	6.80	7.20	7.50
61	5.49	5.79	6.10	6.40	6.71	6.91	7.32	7.62
62	5.58	5.89	6.20	6.51	6.82	7.03	7.44	7.75
63	5.67	5.98	6.30	6.61	6.93	7.24	7.56	7.87
64	5.76	6.08	6.40	6.72	7.04	7.36	7.68	8.00
65	5.85	6.17	6.50	6.82	7.15	7.47	7.80	8.12
66	5.94	6.27	6.60	6.93	7.26	7.59	7.92	8.25
67	6.03	6.36	6.70	7.03	7.37	7.70	8.04	8.37
68	6.12	6.46	6.80	7.14	7.48	7.82	8.16	8.50
69	6.21	6.55	6.90	7.24	7.59	7.93	8.28	8.62
70	6.30	6.65	7.00	7.35	7.70	8.05	8.40	8.75
71	6.39	6.74	7.10	7.45	7.81	8.16	8.52	8.87
72	6.48	6.84	7.20	7.56	7.92	8.28	8.64	9.00
73	6.57	6.93	7.30	7.66	8.03	8.39	8.76	9.12
74	6.66	7.03	7.40	7.77	8.14	8.51	8.88	9.25
75	6.75	7.12	7.50	7.87	8.25	8.62	9.00	9.37
76	6.84	7.22	7.60	7.98	8.36	8.74	9.12	9.50
77	6.93	7.31	7.70	8.08	8.47	8.85	9.24	9.62
78	7.02	7.41	7.80	8.19	8.58	8.97	9.36	9.75
79	7.11	7.50	7.90	8.29	8.69	9.08	9.48	9.87
80	7.20	7.60	8.00	8.40	8.80	9.20	9.60	10.00
81	7.29	7.69	8.10	8.50	8.91	9.31	9.72	10.12
82	7.38	7.79	8.20	8.61	9.02	9.43	9.84	10.25
83	7.47	7.88	8.30	8.71	9.13	9.54	9.96	10.37
84	7.56	7.98	8.40	8.82	9.24	9.66	10.08	10.50
85	7.65	8.07	8.50	8.92	9.35	9.77	10.20	10.62

True per cent. of proof.	WINE-GALLONS.							
	9	9½	10	10½	11	11½	12	12½
86...	7.74	8.17	8.60	9.03	9.46	9.89	10.32	10.75
87...	7.83	8.26	8.70	9.13	9.57	10.00	10.44	10.87
88...	7.92	8.36	8.80	9.24	9.68	10.12	10.56	11.00
89...	8.01	8.45	8.90	9.34	9.79	10.23	10.68	11.12
90...	8.10	8.55	9.00	9.45	9.90	10.35	10.80	11.25
91...	8.19	8.64	9.10	9.55	10.01	10.46	10.92	11.37
92...	8.28	8.74	9.20	9.66	10.12	10.58	11.04	11.50
93...	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62
94...	8.46	8.93	9.40	9.87	10.34	10.81	11.28	11.75
95...	8.55	9.02	9.50	9.97	10.45	10.92	11.40	11.87
96...	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
97...	8.73	9.21	9.70	10.18	10.67	11.15	11.64	12.12
98...	8.82	9.31	9.80	10.29	10.78	11.27	11.76	12.25
99...	8.91	9.40	9.90	10.39	10.89	11.38	11.88	12.37
100...	9.00	9.50	10.00	10.50	11.00	11.50	12.00	12.50
101...	9.09	9.59	10.10	10.60	11.11	11.61	12.12	12.62
102...	9.18	9.69	10.20	10.71	11.22	11.73	12.24	12.75
103...	9.27	9.78	10.30	10.81	11.33	11.84	12.36	12.87
104...	9.36	9.88	10.40	10.92	11.44	11.96	12.48	13.00
105...	9.45	9.97	10.50	11.02	11.55	12.07	12.60	13.12
106...	9.54	10.07	10.60	11.13	11.66	12.19	12.72	13.25
107...	9.63	10.16	10.70	11.23	11.77	12.30	12.84	13.37
108...	9.72	10.26	10.80	11.34	11.88	12.42	12.96	13.50
109...	9.81	10.35	10.90	11.44	11.99	12.53	13.08	13.62
110...	9.90	10.45	11.00	11.55	12.10	12.65	13.20	13.75
111...	9.99	10.54	11.10	11.65	12.21	12.76	13.32	13.87
112...	10.08	10.64	11.20	11.76	12.32	12.88	13.44	14.00
113...	10.17	10.73	11.30	11.86	12.43	12.99	13.56	14.12
114...	10.26	10.83	11.40	11.97	12.54	13.11	13.68	14.25
115...	10.35	10.92	11.50	12.07	12.65	13.22	13.80	14.37
116...	10.44	11.02	11.60	12.18	12.76	13.34	13.92	14.50
117...	10.53	11.11	11.70	12.28	12.87	13.45	14.04	14.62
118...	10.62	11.21	11.80	12.39	12.98	13.57	14.16	14.75
119...	10.71	11.30	11.90	12.49	13.09	13.68	14.28	14.87
120...	10.80	11.40	12.00	12.60	13.20	13.80	14.40	15.00
121...	10.89	11.49	12.10	12.70	13.31	13.91	14.52	15.12
122...	10.98	11.59	12.20	12.81	13.42	14.03	14.64	15.25
123...	11.07	11.68	12.30	12.91	13.53	14.14	14.76	15.37
124...	11.16	11.78	12.40	13.02	13.64	14.26	14.88	15.50
125...	11.25	11.87	12.50	13.12	13.75	14.37	15.00	15.62
126...	11.34	11.97	12.60	13.23	13.86	14.49	15.12	15.75
127...	11.43	12.06	12.70	13.33	13.97	14.60	15.24	15.87
128...	11.52	12.16	12.80	13.44	14.08	14.72	15.36	16.00
129...	11.61	12.25	12.90	13.54	14.19	14.83	15.48	16.12
130...	11.70	12.35	13.00	13.65	14.30	14.95	15.60	16.25
131...	11.79	12.44	13.10	13.75	14.41	15.06	15.72	16.37

True per cent. of proof.	WINE-GALLONS.							
	9	9½	10	10½	11	11½	12	12¼
132...	11.88	12.54	13.20	13.86	14.52	15.18	15.84	16.50
133...	11.97	12.63	13.30	13.96	14.63	15.29	15.96	16.62
134...	12.06	12.73	13.40	14.07	14.74	15.41	16.08	16.75
135...	12.15	12.82	13.50	14.17	14.85	15.52	16.20	16.87
136...	12.24	12.92	13.60	14.28	14.96	15.64	16.32	17.00
137...	12.33	13.01	13.70	14.38	15.07	15.75	16.44	17.12
138...	12.42	13.11	13.80	14.49	15.18	15.87	16.56	17.25
139...	12.51	13.20	13.90	14.59	15.29	15.98	16.68	17.37
140...	12.60	13.30	14.00	14.70	15.40	16.10	16.80	17.50
141...	12.69	13.39	14.10	14.80	15.51	16.21	16.92	17.62
142...	12.78	13.49	14.20	14.91	15.62	16.33	17.04	17.75
143...	12.87	13.58	14.30	15.01	15.73	16.44	17.16	17.87
144...	12.96	13.68	14.40	15.12	15.84	16.56	17.28	18.00
145...	13.05	13.77	14.50	15.22	15.95	16.67	17.40	18.12
146...	13.14	13.87	14.60	15.33	16.06	16.79	17.52	18.25
147...	13.23	13.96	14.70	15.43	16.17	16.90	17.64	18.37
148...	13.32	14.06	14.80	15.54	16.28	17.02	17.76	18.50
149...	13.41	14.15	14.90	15.64	16.39	17.13	17.88	18.62
150...	13.50	14.25	15.00	15.75	16.50	17.25	18.00	18.75
151...	13.59	14.34	15.10	15:85	16.61	17.36	18.12	18.87
152...	13.68	14.44	15.20	15.96	16.72	17.48	18.24	19.00
153...	13.77	14.53	15.30	16.06	16.83	17.59	18.36	19.12
154...	13.86	14.63	15.40	16.17	16.94	17.71	18.48	19.25
155...	13.95	14.72	15.50	16.27	17.05	17.82	18.60	19.37
156...	14.04	14.82	15.60	16.38	17.16	17.94	18.72	19.50
157...	14.13	14.91	15.70	16.48	17.27	18.05	18.84	19.62
158...	14.22	15.01	15.80	16.59	17.38	18.17	18.96	19.75
159...	14.31	15.10	15.90	16.69	17.49	18.28	19.08	19.87
160...	14.40	15.20	16.00	16.80	17.60	18.40	19.20	20.00

True per cent. of proof.	WINE-GALLONS.							
	13	13½	14	14½	15	15½	16	16½
40	5.20	5.40	5.60	5.80	6.00	6.20	6.40	6.60
41	5.33	5.53	5.74	5.94	6.15	6.35	6.56	6.76
42	5.46	5.67	5.88	6.09	6.30	6.51	6.72	6.93
43	5.59	5.80	6.02	6.23	6.45	6.66	6.88	7.09
44	5.72	5.94	6.16	6.38	6.60	6.82	7.04	7.26
45	5.85	6.07	6.30	6.52	6.75	6.97	7.20	7.42
46	5.98	6.21	6.44	6.67	6.90	7.13	7.36	7.59
47	6.11	6.34	6.58	6.81	7.05	7.28	7.52	7.75
48	6.24	6.48	6.72	6.96	7.20	7.44	7.68	7.92
49	6.37	6.61	6.86	7.10	7.35	7.59	7.84	8.08
50	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25
51	6.63	6.88	7.14	7.39	7.65	7.90	8.16	8.41
52	6.76	7.02	7.28	7.54	7.80	8.06	8.32	8.58
53	6.89	7.15	7.42	7.68	7.95	8.21	8.48	8.74
54	7.02	7.29	7.56	7.83	8.10	8.37	8.64	8.91
55	7.15	7.42	7.70	7.97	8.25	8.52	8.80	9.07
56	7.28	7.56	7.84	8.12	8.40	8.68	8.96	9.24
57	7.41	7.69	7.98	8.26	8.55	8.83	9.12	9.40
58	7.54	7.83	8.12	8.41	8.70	8.99	9.28	9.57
59	7.67	7.96	8.26	8.55	8.85	9.14	9.44	9.73
60	7.80	8.10	8.40	8.70	9.00	9.30	9.60	9.90
61	7.93	8.23	8.54	8.84	9.15	9.45	9.76	10.06
62	8.06	8.37	8.68	8.99	9.30	9.61	9.92	10.23
63	8.19	8.50	8.82	9.13	9.45	9.76	10.08	10.39
64	8.32	8.64	8.96	9.28	9.60	9.92	10.24	10.56
65	8.45	8.77	9.10	9.42	9.75	10.07	10.40	10.72
66	8.58	8.91	9.24	9.57	9.90	10.23	10.56	10.89
67	8.71	9.04	9.38	9.71	10.05	10.38	10.72	11.05
68	8.84	9.18	9.52	9.86	10.20	10.54	10.88	11.22
69	8.97	9.31	9.66	10.00	10.35	10.69	11.04	11.38
70	9.10	9.45	9.80	10.15	10.50	10.85	11.20	11.55
71	9.23	9.58	9.94	10.29	10.65	11.00	11.36	11.71
72	9.36	9.72	10.08	10.44	10.80	11.16	11.52	11.88
73	9.49	9.85	10.22	10.58	10.95	11.31	11.68	12.04
74	9.62	9.99	10.36	10.73	11.10	11.47	11.84	12.21
75	9.75	10.12	10.50	10.87	11.25	11.62	12.00	12.37
76	9.88	10.26	10.64	11.02	11.40	11.78	12.16	12.54
77	10.01	10.39	10.78	11.16	11.55	11.93	12.32	12.70
78	10.14	10.53	10.92	11.31	11.70	12.09	12.48	12.87
79	10.27	10.66	11.06	11.45	11.85	12.24	12.64	13.03
80	10.40	10.80	11.20	11.60	12.00	12.40	12.80	13.20
81	10.53	10.93	11.34	11.74	12.15	12.55	12.96	13.36
82	10.66	11.07	11.48	11.89	12.30	12.71	13.12	13.53
83	10.79	11.20	11.62	12.03	12.45	12.86	13.28	13.69
84	10.92	11.34	11.76	12.18	12.60	13.02	13.44	13.86
85	11.05	11.47	11.90	12.32	12.75	13.17	13.60	14.02

True per cent. of proof.	WINE-GALLONS.							
	13	13½	14	14½	15	15½	16	16½
86...	11.18	11.61	12.04	12.47	12.90	13.33	13.76	14.19
87...	11.31	11.74	12.18	12.61	13.05	13.48	13.92	14.35
88...	11.44	11.88	12.32	12.76	13.20	13.64	14.08	14.52
89...	11.57	12.01	12.46	12.90	13.35	13.79	14.24	14.68
90...	11.70	12.15	12.60	13.05	13.50	13.95	14.40	14.85
91...	11.83	12.28	12.74	13.19	13.65	14.10	14.56	15.01
92...	11.96	12.42	12.88	13.34	13.80	14.26	14.72	15.18
93...	12.09	12.53	13.02	13.48	13.95	14.41	14.88	15.34
94...	12.22	12.69	13.16	13.63	14.10	14.57	15.04	15.51
95...	12.35	12.82	13.30	13.77	14.25	14.72	15.20	15.67
96...	12.48	12.96	13.44	13.92	14.40	14.88	15.36	15.84
97...	12.61	13.09	13.58	14.06	14.55	15.03	15.52	16.00
98...	12.74	13.23	13.72	14.21	14.70	15.19	15.68	16.17
99...	12.87	13.36	13.86	14.35	14.85	15.34	15.84	16.33
100...	13.00	13.50	14.00	14.50	15.00	15.50	16.00	16.50
101...	13.13	13.63	14.14	14.64	15.15	15.65	16.16	16.66
102...	13.26	13.77	14.28	14.79	15.30	15.81	16.32	16.83
103...	13.39	13.90	14.42	14.93	15.45	15.96	16.48	16.99
104...	13.52	14.04	14.56	15.08	15.60	16.12	16.64	17.16
105...	13.65	14.17	14.70	15.22	15.75	16.27	16.80	17.32
106...	13.78	14.31	14.84	15.37	15.90	16.43	16.96	17.49
107...	13.91	14.44	14.98	15.51	16.05	16.58	17.12	17.65
108...	14.04	14.58	15.12	15.66	16.20	16.74	17.28	17.82
109...	14.17	14.71	15.26	15.80	16.35	16.89	17.44	17.98
110...	14.30	14.85	15.40	15.95	16.50	17.05	17.60	18.15
111...	14.43	14.98	15.54	16.09	16.65	17.20	17.76	18.31
112...	14.56	15.12	15.68	16.24	16.80	17.36	17.92	18.48
113...	14.69	15.25	15.82	16.38	16.95	17.51	18.08	18.64
114...	14.82	15.39	15.96	16.53	17.10	17.67	18.24	18.81
115...	14.95	15.52	16.10	16.67	17.25	17.82	18.40	18.97
116...	15.08	15.66	16.24	16.82	17.40	17.98	18.56	19.14
117...	15.21	15.79	16.38	16.96	17.55	18.13	18.72	19.30
118...	15.34	15.93	16.52	17.11	17.70	18.29	18.88	19.47
119...	15.47	16.06	16.66	17.25	17.85	18.44	19.04	19.63
120...	15.60	16.20	16.80	17.40	18.00	18.60	19.20	19.80
121...	15.73	16.33	16.94	17.54	18.15	18.75	19.36	19.96
122...	15.86	16.47	17.08	17.69	18.30	18.81	19.52	20.13
123...	15.99	16.60	17.22	17.83	18.45	19.06	19.68	20.29
124...	16.12	16.74	17.36	17.98	18.60	19.22	19.84	20.46
125...	16.25	16.87	17.50	18.12	18.75	19.37	20.00	20.62
126...	16.38	17.01	17.64	18.27	18.90	19.53	20.16	20.79
127...	16.51	17.14	17.78	18.42	19.05	19.68	20.32	20.95
128...	16.64	17.28	17.92	18.56	19.20	19.84	20.48	21.12
129 ..	16.77	17.41	18.06	18.71	19.35	19.99	20.64	21.28
130...	16.90	17.55	18.20	18.85	19.50	20.15	20.80	21.45
131...	17.03	17.68	18.34	19.00	19.65	20.30	20.96	21.61

True per cent. of proof.	WINE-GALLONS.							
	13	13½	14	14½	15	15½	16	16½
132...	17.16	17.82	18.48	19.14	19.80	20.46	21.12	21.78
133...	17.29	17.95	18.62	19.29	19.95	20.61	21.28	21.94
134 ..	17.42	18.09	18.76	19.43	20.10	20.77	21.44	22.11
135...	17.55	18.22	18.90	19.58	20.25	20.92	21.60	22.27
136...	17.68	18.36	19.04	19.72	20.40	21.08	21.76	22.44
137...	17.81	18.49	19.18	19.87	20.55	21.23	21.92	22.60
138...	17.94	18.63	19.32	20.01	20.70	21.39	22.08	22.77
139...	18.07	18.76	19.46	20.16	20.85	21.54	22.24	22.93
140...	18.20	18.90	19.60	20.30	21.00	21.70	22.40	23.10
141...	18.33	19.03	19.74	20.45	21.15	21.85	22.56	23.26
142...	18.46	19.17	19.88	20.59	21.30	22.01	22.72	23.43
143...	18.59	19.30	20.02	20.74	21.45	22.16	22.88	23.59
144...	18.72	19.44	20.16	20.88	21.60	22.32	23.04	23.76
145...	18.85	19.57	20.30	21.03	21.75	22.47	23.20	23.92
146...	18.98	19.71	20.44	21.17	21.90	22.63	22.36	24.09
147...	19.11	19.84	20.58	21.32	22.05	22.78	23.52	24.25
148...	19.24	19.98	20.72	21.46	22.20	22.94	23.68	24.42
149...	19.37	20.11	20.86	21.61	22.35	23.09	23.84	24.58
150...	19.50	20.25	21.00	21.75	22.50	23.25	24.00	24.75
151...	19.63	20.38	21.14	21.90	22.65	23.40	24.16	24.91
152...	19.76	20.52	21.28	22.04	22.80	23.56	24.32	25.08
153...	19.89	20.65	21.42	22.19	22.95	23.71	24.48	25.24
154...	20.02	20.79	21.56	22.33	23.10	23.87	24.64	25.41
155...	20.15	20.92	21.70	22.48	23.25	24.02	24.80	25.57
156...	20.28	21.06	21.84	22.62	23.40	24.18	24.96	25.74
157...	20.41	21.19	21.98	22.77	23.55	24.33	25.12	25.90
158...	20.54	21.33	22.12	22.91	23.70	24.49	25.28	26.07
159...	20.67	21.46	22.26	23.06	23.85	24.64	25.44	26.23
160...	20.80	21.60	22.40	23.20	24.00	24.80	25.60	26.40

True per cent. of proof.	WINE-GALLONS.							
	17	17½	18	18½	19	19½	20	20½
40	6.80	7.00	7.20	7.40	7.60	7.80	8.00	8.20
41	6.97	7.17	7.38	7.58	7.79	7.99	8.20	8.40
42	7.14	7.35	7.56	7.77	7.98	8.19	8.40	8.61
43	7.31	7.52	7.74	7.95	8.17	8.38	8.60	8.81
44	7.48	7.70	7.92	8.14	8.36	8.58	8.80	9.02
45	7.65	7.88	8.10	8.32	8.55	8.77	9.00	9.22
46	7.82	8.05	8.28	8.51	8.74	8.97	9.20	9.43
47	7.99	8.23	8.46	8.69	8.93	9.16	9.40	9.63
48	8.16	8.40	8.64	8.88	9.12	9.36	9.60	9.84
49	8.33	8.58	8.82	9.06	9.31	9.55	9.80	10.04
50	8.50	8.75	9.00	9.25	9.50	9.75	10.00	10.25
51	8.67	8.93	9.18	9.43	9.69	9.94	10.20	10.45
52	8.84	9.10	9.36	9.62	9.88	10.14	10.40	10.66
53	9.01	9.28	9.54	9.80	10.07	10.33	10.60	10.86
54	9.18	9.45	9.72	9.99	10.26	10.53	10.80	11.07
55	9.35	9.63	9.90	10.17	10.45	10.72	11.00	11.27
56	9.52	9.80	10.08	10.36	10.64	10.92	11.20	11.48
57	9.69	9.98	10.26	10.54	10.83	11.11	11.40	11.68
58	9.86	10.15	10.44	10.73	11.02	11.31	11.60	11.89
59	10.03	10.33	10.62	10.91	11.21	11.50	11.80	12.09
60	10.20	10.50	10.80	11.10	11.40	11.70	12.00	12.30
61	10.37	10.68	10.98	11.28	11.59	11.89	12.20	12.50
62	10.54	10.85	11.16	11.47	11.78	12.09	12.40	12.71
63	10.71	11.03	11.34	11.65	11.97	12.28	12.60	12.91
64	10.88	11.20	11.52	11.84	12.16	12.48	12.80	13.12
65	11.05	11.38	11.70	12.02	12.35	12.67	13.00	13.32
66	11.22	11.55	11.88	12.21	12.54	12.87	13.20	13.53
67	11.39	11.73	12.06	12.39	12.73	13.06	13.40	13.73
68	11.56	11.90	12.24	12.58	12.92	13.26	13.60	13.94
69	11.73	12.08	12.42	12.76	13.11	13.45	13.80	14.14
70	11.90	12.25	12.60	12.95	13.30	13.65	14.00	14.35
71	12.07	12.43	12.78	13.13	13.49	13.84	14.20	14.55
72	12.24	12.60	12.96	13.32	13.68	14.04	14.40	14.76
73	12.41	12.78	13.14	13.50	13.87	14.23	14.60	14.96
74	12.58	12.95	13.32	13.69	14.06	14.43	14.80	15.17
75	12.75	13.13	13.50	13.87	14.25	14.62	15.00	15.37
76	12.92	13.30	13.68	14.06	14.44	14.82	15.20	15.58
77	13.09	13.48	13.86	14.24	14.63	15.01	15.40	15.78
78	13.26	13.65	14.04	14.43	14.82	15.21	15.60	15.99
79	13.43	13.83	14.22	14.61	15.01	15.40	15.80	16.19
80	13.60	14.00	14.40	14.80	15.20	15.60	16.00	16.40
81	13.77	14.18	14.58	14.98	15.39	15.79	16.20	16.60
82	13.94	14.35	14.76	15.17	15.58	15.99	16.40	16.81
83	14.11	14.53	14.94	15.35	15.77	16.18	16.60	17.01
84	14.28	14.70	15.12	15.54	15.96	16.38	16.80	17.22
85	14.45	14.88	15.30	15.72	16.15	16.57	17.00	17.42

True per cent. of proof.	WINE-GALLONS.							
	17	17½	18	18½	19	19½	20	20½
86...	14.62	15.05	15.48	15.91	16.34	16.77	17.20	17.63
87...	14.79	15.23	15.66	16.09	16.53	16.96	17.40	17.83
88...	14.96	15.40	15.84	16.28	16.72	17.16	17.60	18.04
89...	15.13	15.58	16.02	16.46	16.91	17.35	17.80	18.24
90...	15.30	15.75	16.20	16.65	17.10	17.55	18.00	18.45
91...	15.47	15.93	16.38	16.83	17.29	17.74	18.20	18.65
92...	15.64	16.10	16.56	17.02	17.48	17.94	19.40	18.86
93...	15.81	16.28	16.74	17.20	17.67	18.13	18.60	19.06
94...	15.98	16.45	16.92	17.39	17.86	18.33	18.80	19.27
95...	16.15	16.63	17.10	17.57	18.05	18.52	19.00	19.47
96...	16.32	16.80	17.28	17.76	18.24	18.72	19.20	19.68
97...	16.49	16.98	17.46	17.94	18.43	18.91	19.40	19.88
98...	16.66	17.15	17.64	18.13	18.62	19.11	19.60	20.09
99...	16.83	18.33	17.82	18.31	18.81	19.30	19.80	20.29
100...	17.00	17.50	18.00	18.50	19.00	19.50	20.00	20.50
101...	17.17	17.68	18.18	18.68	19.19	19.69	20.20	20.70
102...	17.34	17.85	18.36	18.87	19.38	19 89	20.40	20.91
103...	17.51	18.03	18.54	19.05	19.57	20.08	20.60	21.11
104...	17.68	18.20	18.72	19.24	19.76	20.28	20.80	21.32
105...	17.85	18.38	18.90	19.42	19.95	20.47	21.00	21.52
106...	18.02	18.55	19.08	19.61	20.14	20.67	21.20	21.73
107...	18.19	18.73	19.26	19.79	20.33	20.86	21.40	21.93
108...	18.36	18.90	19.44	19.98	20.52	21.06	21.60	22.14
109...	18.53	19.08	19.62	20.16	20.71	21.25	21.80	22.34
110...	18.70	19.25	19.80	20.35	20.90	21.45	22.00	22.55
111...	18.87	19.43	19.98	20.53	21.09	21.64	22.20	22.75
112...	19.04	19.60	20.16	20.72	21.28	21.84	23.40	22.96
113...	19.21	19.78	20.34	20.90	21.47	22.03	22.60	23.16
114...	19.38	19.95	20.52	21.09	21.66	22.23	22.80	23.37
115...	19.55	20.13	20.70	21.27	21.85	22.42	23.00	23.57
116...	19.72	20.30	20.88	21.46	22.04	22.62	23.20	23.78
117...	19.89	20.48	21.06	21.64	22.23	22.81	23.40	23.98
118...	20.06	20.65	21.24	21.83	22.42	23.01	23.60	24.19
119...	20.23	20.83	21.42	22.01	22.61	23.20	23.80	24.39
120...	20.40	21.00	21.60	22.20	22.80	23.40	24.00	24.60
121...	20.57	21.18	21.78	22.38	22.99	23.59	24.20	24.80
122...	20.74	21.35	21.96	22.57	23.18	23.79	24.40	25.01
123...	20.91	21.53	22.14	22.75	23.37	22.98	24.60	25.21
124...	21.08	21.70	22.32	22.94	23.56	24.18	24.80	25.42
125...	21.25	21.88	22.50	23.12	23.75	24.37	25.00	25.62
126...	21.42	22.05	22.68	23.31	23.94	24.57	25.20	25.83
127...	21.59	22.23	23.86	23.49	24.13	24.76	25.40	26.03
128...	21.76	22.40	23.04	23.68	24.32	24.96	25.60	26.24
129...	21.93	22.58	23.22	23.86	24.51	25.15	25.80	26.44
130...	22.10	22.75	23.40	24.05	24.70	25.35	26.00	26.65
131...	22.27	22.93	23.58	24.23	24.89	25.54	26.20	26.85

True per cent. of proof.	WINE-GALLONS.							
	17	17½	18	18½	19	19½	20	20½
132...	22.44	23.10	23.76	24.42	25.08	25.74	26.40	27.06
133...	26.61	23.28	23.94	24.60	25.27	25.93	26.60	27.26
134...	22.78	23.45	24.12	24.79	25.46	26.13	26.80	27.47
135...	22.95	23.63	24.30	24.97	25.65	26.32	27.00	27.67
136...	23.12	23.80	24.48	25.16	25.84	26.52	27.20	27.88
137...	23.29	23.98	24.66	25.34	26.03	26.71	27.40	28.08
138...	23.46	24.15	24,84	25.53	26.22	26.91	27.60	28.29
139...	23.63	24.33	25.02	25.71	26.41	27.10	27.80	28.49
140...	23.80	24.50	25.20	25.90	26.60	27.30	28.00	28.70
141...	23.97	24.68	25.38	26.08	26.79	27.49	28.20	28.90
142...	24.14	24.85	25.56	26.27	26.98	27.69	28.40	29.11
143...	24.31	25.03	25.74	26.45	27.17	27.88	28.60	29.31
144...	24.48	25.20	25.92	26.64	27.36	28.08	28.80	29.52
145...	24.65	25.38	26.10	26.82	27.55	28.27	29.00	29.72
146...	24.82	25.55	26.28	27.01	27.74	28.47	29.20	29.93
147...	24.99	25.73	26.46	27.19	27.93	28.66	29.40	30.13
148...	25.16	25.90	26.64	27.38	28.12	28.86	29.60	30.34
149...	25.33	26.08	26.82	27.56	28.31	29.05	29.80	30.54
150...	25.50	26.25	27.00	27.75	28.50	29.25	30.00	30.75
151...	25.67	26.43	27.18	27.93	28.69	29.44	30.20	30.95
152...	25.84	26.60	27.36	28.12	28.88	29.64	30.40	31.16
153...	26.01	26.78	27.54	28.30	29.07	29.83	30.60	31.36
154...	26.18	26.95	27.72	28.49	29.26	30.03	30.80	31.57
155...	26.35	27.13	27.90	28.67	29.45	30.22	31.00	31.77
156...	26.52	27.30	28.08	28.86	29.64	30.42	31.20	31.98
157...	29.69	27.48	28.26	29.04	29.83	30.61	31.40	32.18
158...	26.86	27.65	28.44	29.23	30.02	30.81	31.60	32.39
159...	27.03	27.83	28.62	29.41	30.21	31.00	31.80	32.59
160...	27.20	28.00	28.80	29.60	30.40	31.20	32.00	32.80

True per cent. of proof.	WINE-GALLONS.							
	21	21½	22	22½	23	23½	24	24½
40	8.40	8.60	8.80	9.00	9.20	9.40	9.60	9.80
41	8.61	8.81	9.02	9.22	9.43	9.63	9.84	10.04
42	8.82	9.03	9.24	9.45	9.66	9.87	10.08	10.29
43	9.03	9.24	9.46	9.67	9.89	10.10	10.32	10.53
44	9.24	9.46	9.68	9.90	10.12	10.34	10.56	10.78
45	9.45	9.67	9.90	10.12	10.35	10.57	10.80	11.02
46	9.66	9.89	10.12	10.35	10.58	10.81	11.04	11.27
47	9.87	10.10	10.34	10.57	10.81	11.04	11.28	11.51
48	10.08	10.32	10.56	10.80	11.04	11.28	11.52	11.76
49	10.29	10.53	10.78	11.02	11.27	11.51	11.76	12.00
50	10.50	10.75	11.00	11.25	11.50	11.75	12.00	12.25
51	10.71	10.96	11.22	11.47	11.73	11.98	12.24	12.49
52	10.92	11.18	11.44	11.70	11.96	12.22	12.48	12.74
53	11.13	11 39	11.66	11.92	12.19	12.45	12.72	12.98
54	11.34	11.61	11.88	12.15	12.42	12.69	12.96	13.23
55	11.55	11.82	12.10	12.37	12.65	12.92	13.20	13.47
56	11.76	12.04	12.32	12.60	12.88	13.16	13.44	13.72
57	11.97	12.22	12.54	12.82	13.11	13.39	13.68	13.96
58	12.18	12.47	12.76	13.05	13.34	13.63	13.92	14.21
59	12.39	12.68	12.98	13.27	13.57	13.86	14.16	14.45
60	12.60	12.90	13.20	13.50	13.80	14.10	14.40	14.70
61	12.81	13.11	13.42	13.72	14.03	14.33	14.64	14.94
62	13.02	13.33	13.64	13.95	14.26	14.57	14.88	15.19
63	13.23	13.54	13.86	14.17	14.49	14.80	15.12	15.34
64	13.44	13.76	14.08	14.40	14.72	15.04	15.36	15.68
65	13.65	13.97	14.30	14.62	14.95	15.27	15.60	15.92
66	13.86	14.19	14.52	14.85	15.18	15.51	15.84	16.17
67	14.07	14.40	14.74	15.07	15.41	15.74	16.08	16.41
68	14.28	14.62	14.96	15.30	15.64	15.98	16.32	16.66
69	14.49	14.83	15.18	15.52	15.87	16.21	16.56	16.90
70	14.70	15.05	15.40	15.75	16.10	16.45	16.80	17.15
71	14.91	15.26	15.62	15.97	16.33	16.68	17.04	17.39
72	15.12	15.48	15.84	16.20	16.56	16.92	17.28	17.64
73	15.33	15.69	16.06	16.42	16.79	17.15	17.52	17.88
74	15.54	15.91	16.28	16.65	17.02	17.39	17.76	18.13
75	15.75	16.12	16.50	16.87	17.25	17.62	18.00	18.37
76	15.96	16.34	16.72	17.10	17.48	17.86	18.24	18.62
77	16.17	16.55	16.94	17.32	17.71	18.09	18.48	18.86
78	16.38	16.77	17.16	17.55	17.94	18.33	18.72	19.11
79	16.59	16.98	17.38	17.77	18.17	18.56	18.96	19.35
80	16.80	17.20	17.60	18.00	18.40	18.80	19.20	19.60
81	17.01	17.41	17.82	18.22	18.63	19.03	19.44	19.84
82	17.22	17.63	18.04	18.45	18.86	19.27	19.68	20.09
83	17.43	17.84	18.26	18.67	19.09	19.50	19.92	20.33
84	17.64	18.06	18.48	18.90	19.32	19.74	20.16	20.58
85	17.85	18.27	18.70	19.12	19.55	19.97	20.40	20.82

Tare per cent. of proof.	WINE-GALLONS.							
	21	21½	22	22½	23	23½	24	24½
86...	18.06	18.49	18.92	19.35	19.78	20.21	20.64	21.07
87...	18.27	18.70	19.14	19.57	20.01	20.44	20.88	21.31
88...	18.48	18.92	19.36	19.80	20.24	20.68	21.12	21.56
89...	18.69	19.13	19.58	20.02	20.47	20.91	21.36	21.80
90...	18.90	19.35	19.80	20.25	20.70	21.15	21.60	22.05
91...	19.11	19.56	20.02	20.47	20.93	21.38	21.84	22.29
92...	19.32	19.78	20.24	20.70	21.16	21.62	22.08	22.54
93...	19.53	19.99	20.46	20.92	21.39	21.85	22.32	22.78
94...	19.74	20.21	20.68	21.15	21.62	22.09	22.56	23.03
95...	19.95	20.42	20.90	21.37	21.85	22.32	22.80	23.27
96...	20.16	20.64	21.12	21.60	22.08	22.56	23.04	23.52
97...	20.37	20.85	21.34	21.82	22.31	22.79	23.28	23.76
98...	20.58	21.07	21.56	22.05	22.54	23.03	23.52	24.01
99...	20.79	21.28	21.78	22.27	22.77	23.26	23.76	24.25
100...	21.00	21.50	22.00	22.50	23.00	23.50	24.00	24.50
101...	21.21	21.71	22.22	22.72	23.23	23.73	24.24	24.74
102...	21.42	21.93	22.44	22.95	23.46	23.97	24.48	24.99
103...	21.63	22.14	22.66	23.17	23.69	24.20	24.72	25.23
104...	21.84	22.36	22.88	23.40	23.92	24.44	24.96	25.48
105...	22.05	22.57	23.10	23.62	24.15	24.67	25.20	25.72
106...	22.26	22.79	23.32	23.85	24.38	24.91	25.44	25.97
107...	22.47	23.00	23.54	24.07	24.61	25.14	25.68	26.21
108...	22.68	23.22	23.76	24.30	24.84	25.38	25.92	26.46
109...	22.89	23.43	23.98	24.52	25.07	25.61	26.16	26.70
110...	23.10	23.65	24.20	24.75	25.30	25.85	26.40	26.95
111...	23.31	23.86	24.42	24.97	25.53	26.08	26.64	27.19
112...	23.52	24.08	24.64	25.20	25.76	26.32	26.88	27.44
113...	23.73	24.29	24.86	25.42	25.99	26.55	27.12	27.68
114...	23.94	24.51	25.08	25.65	26.22	26.79	27.36	27.93
115...	24.15	24.72	25.30	25.87	26.45	27.02	27.60	28.17
116...	24.36	24.94	25.52	26.10	26.68	27.26	27.84	28.42
117...	24.57	25.15	25.74	26.32	26.91	27.49	28.08	28.66
118...	24.78	25.37	25.96	26.55	27.14	27.73	28.32	28.91
119...	24.99	25.58	26.18	26.77	27.37	27.96	28.56	29.15
120...	25.20	25.80	26.40	27.00	27.60	28.20	28.80	29.40
121...	25.41	26.01	26.62	27.22	27.83	28.43	29.04	29.64
122...	25.62	26.23	26.84	27.45	28.06	28.67	29.28	29.89
123...	25.83	26.44	27.06	27.67	28.29	28.90	29.52	30.13
124...	26.04	26.66	27.28	27.90	28.52	29.14	29.76	30.38
125...	26.25	26.87	27.50	28.12	28.75	29.37	30.00	30.62
126...	26.46	27.09	27.72	28.35	28.98	29.61	30.24	30.87
127...	26.67	27.30	27.94	28.57	29.21	29.84	30.48	31.11
128...	26.88	27.52	28.16	28.80	29.44	30.08	30.72	31.36
129...	27.09	27.73	28.38	29.02	29.67	30.31	30.96	31.60
130...	27.30	27.95	28.60	29.25	29.90	30.55	31.20	31.85
131...	27.51	28.16	28.82	29.47	30.13	30.78	31.44	32.09

True per cent. of proof.	WINE-GALLONS.							
	21	21½	22	22½	23	23½	24	24½
132...	27.72	28.38	29.04	29.70	30.36	31.02	31.68	32.34
133...	27.93	28.59	29.26	29.92	30.59	31.25	31.92	32.58
134...	28.14	28.81	29.48	30.15	30.82	31.49	32.16	32.83
135...	28.35	29.02	29.70	30.37	31.05	31.72	32.40	33.07
136...	28.56	29.24	29.92	30.60	31.28	31.96	32.64	33.32
137 ..	28.77	29.45	30.14	30.82	31.51	32.19	32.88	33.56
138...	28.98	29.67	30.36	31.05	31.74	32.43	33.12	33.81
139...	29.19	29.88	30.58	31.27	31.97	32.66	33.36	34.05
140...	29.40	30.10	30.80	31.50	32.20	32.90	33.60	34.30
141...	29.61	30.31	31.02	31.72	32.43	33.13	33.84	34.54
142...	29.82	30.53	31.24	31.95	32.66	33.37	34.08	34.79
143...	30.03	30.74	31.46	32.17	32.89	33.60	34.32	35.03
144...	30.24	30.96	31.68	32.40	33.12	33.84	34.56	35.28
145...	30.45	31.17	31.90	32.62	33.35	34.07	34.80	35.52
146 ..	30.66	31.39	32.12	32.85	33.58	34.31	35.04	35.77
147...	30.87	31.60	32.34	33.07	33.81	34.54	35.28	36.01
148...	31.08	31.82	32.56	33.30	34.04	34.78	35.52	36.26
149...	31.29	32.03	32.78	33.52	34.27	35.01	35.76	36.50
150...	31.50	32.25	33.00	33.75	34.50	35.25	36.00	36.75
151...	31.71	32.46	33.22	33.97	34.73	35.48	36.24	36.99
152...	31.92	32.68	33.44	34.20	34.96	35.72	36.48	37.24
153...	32.13	32.89	33.66	34.42	35.19	35.95	36.72	37.48
154...	32.34	33.11	33.88	34.65	35.42	36.19	36.96	37.73
155...	32.55	33.32	34.10	34.87	35.65	36.42	37.20	37.97
156...	32.76	33.54	34.32	35.10	35.88	36.66	37.44	38.22
157...	32.97	33.75	34.54	35.32	36.11	36.89	37.68	38.46
158...	33.18	33.97	34.76	35.55	36.34	37.13	37.92	38.71
159...	33.39	34.18	34.98	35.77	36.57	37.36	38.16	38.95
160...	33.60	34.40	35.20	36.00	36.80	37.60	38.40	39.20

True per cent. of proof.	WINE-GALLONS.							
	25	25½	26	26½	27	27½	28	28½
40	10.00	10.20	10.40	10.60	10.80	11.00	11.20	11.40
41	10.25	10.45	10.66	10.86	11.07	11.27	11.48	11.68
42	10.50	10.71	10.92	11.13	11.34	11.55	11.76	11.97
43	10.75	10.96	11.18	11.39	11.61	11.82	12.04	12.25
44	11.00	11.22	11.44	11.66	11.88	12.10	12.32	12.54
45	11.25	11.47	11.70	11.92	12.15	12.37	12.60	12.82
46	11.50	11.73	11.96	12.19	12.42	12.65	12.88	13.11
47	11.75	11.98	12.22	12.45	12.69	12.92	13.16	13.39
48	12.00	12.24	12.48	12.72	12.96	13.20	13.44	13.68
49	12.25	12.49	12.74	12.98	13.23	13.47	13.72	13.96
50	12.50	12.75	13.00	13.25	13.50	13.75	14.00	14.25
51	12 75	13.00	13.26	13.51	13.77	14.02	14.28	14.53
52	13.00	13.26	13.52	13.78	14.04	14.30	14.56	14.82
53	13.25	13.51	13.78	14.04	14.31	14.57	14.84	15.10
54	13.50	13.77	14.04	14.31	14.58	14.85	15.12	15.39
55	13.75	14.02	14.30	14.57	14.85	15.12	15.40	15.67
56	14.00	14.28	14.56	14.84	15.12	15.40	15.68	15.96
57	14.25	14.53	14.82	15.10	15.39	15.67	15.96	16.24
58	14.50	14.79	15.08	15.37	15.66	15.95	16.24	16.53
59	14.75	15.04	15.34	15.63	15.93	16.22	16.52	16.81
60	15.00	15.30	15.60	15.90	16.20	16.50	16.80	17.10
61	15.25	15.55	15.86	16.16	16.47	16.77	17.08	17.38
62	15.50	15.81	16.12	16.43	16.74	17.05	17.36	17.67
63	15.75	16.06	16.38	16.69	17.01	17.32	17.64	17.95
64	16.00	16.32	16.64	16.96	17.28	17.60	17.92	18.24
65	16.25	16.57	16.90	17.22	17.55	17.87	18.20	18.52
66	16.50	16.83	17.16	17.49	17.82	18.15	18.48	18.81
67	16.75	17.08	17.42	17.75	18.09	18.42	18.76	19.09
68	17.00	17.34	17.68	18.02	18.36	18.70	19.04	19.38
69	17.25	17.59	17.94	18.28	18.63	18.97	19.32	19.66
70	17.50	17.85	18.20	18.55	18.90	19.25	19.60	19.95
71	17.75	18.10	18.46	18.81	19.17	19.52	19.88	20.23
72	18.00	18.36	18.72	19.08	19.44	19.80	20.16	20.52
73	18.25	18.61	18.98	19.34	19.71	20.07	20.44	20.80
74	18.50	18.87	19.24	19.61	19.98	20.35	20.72	21.09
75	18.75	19.12	19.50	19.87	20.25	20.62	21.00	21.37
76	19.00	19.38	19.76	20.14	20.52	20.90	21.28	21.66
77	19.25	19.63	20.02	20.40	20.79	21.17	21.56	21.94
78	19.50	19.89	20.28	20.67	21.06	21.45	21.84	22.23
79	19.75	20.14	20.54	20.93	21.33	21.72	22.12	22.51
80	20.00	20.40	20.80	21.20	21.60	22.00	22.40	22.80
81	20.25	20.65	21.06	21.46	21.87	22.27	22.68	23.08
82	20.50	20.91	21.32	21.73	22.14	22.55	22.96	23.37
83	20.75	21.16	21.58	21.99	22.41	22.82	23.24	23.65
84	21.00	21.42	21.84	22.26	22.68	23.10	23.52	23.94
85	21.25	21.67	22.10	22.52	22.95	23.37	23.80	24.22

True per cent. of proof.	WINE-GALLONS.							
	25	25½	26	26½	27	27½	28	28½
86...	21.50	21.93	22.36	22.79	23.22	23.65	24.08	24.51
87...	21.75	22.18	22.62	23.05	23.49	23.92	24.36	24.79
88...	22.00	22.44	22.88	23.32	23.76	24.20	24.64	25.08
89...	22.25	22.69	23.14	23.58	24.03	24.47	24.92	25.36
90...	22.50	22.95	23.40	23.85	24.30	24.75	25.20	25.65
91...	22.75	23.20	23.66	24.11	24.57	25.02	25.48	25.93
92...	23.00	23.46	23.92	24.38	24.84	25.30	25.76	26.22
93...	23.25	23.71	24.18	24.64	25.11	25.57	26.04	26.50
94...	23.50	23.97	24.44	24.91	25.38	25.85	26.32	26.79
95 ..	23.75	24.22	24.70	25.17	25.65	26.12	26.60	27.07
96...	24.00	24.48	24.96	25.44	25.92	26.40	26.88	27.36
97...	24.25	24.73	25.22	25.70	26.19	26.67	27.16	27.64
98...	24.50	24.99	25.48	25.97	26.46	26.95	27.44	27.93
99...	24.75	25.24	25.74	26.23	26.73	27.22	27.72	28.21
100...	25.00	25.50	26.00	26.50	27.00	27.50	28.00	28.50
101...	25.25	25.75	26.26	26.76	27.27	27.77	28.28	28.78
102...	25.50	26.01	26.52	27.03	27.54	28.05	28.56	29.07
103...	25.75	26.26	26.78	27.29	27.81	28.32	28.84	29.35
104...	26.00	26.52	27.04	27.56	28.08	28.60	29.12	29.64
105...	26.25	26.77	27.30	27.82	28.35	28.87	29.40	29.92
106...	26.50	27.03	27.56	28.09	28.62	29.15	29.68	30.21
107...	26.75	27.28	27.82	28.35	28.89	29.42	29.96	30.49
108...	27.00	27.54	28.08	28.62	29.16	29.70	30.24	30.78
109...	27.25	27.79	28.34	28.88	29.43	29.97	30.52	31.06
110...	27.50	28.05	28.60	29.15	29.70	30.25	30.80	31.35
111...	27.75	28.30	28.86	29.41	29.97	30.52	31.08	31.63
112...	28.00	28.56	29.12	29.68	30.24	30.80	31.36	31.92
113...	28.25	28.81	29.38	29.94	30.51	31.07	31.64	32.20
114...	28.50	29.07	29.64	30.21	30.78	31.35	31.92	32.49
115...	28.75	29.32	29.90	30.47	31.05	31.62	32.20	32.77
116...	29.00	29.58	30.16	30.74	31.32	31.90	32.48	33.06
117...	29.25	29.83	30.42	31.00	31.59	32.17	32.76	33.34
118...	29.50	30.09	30.68	31.27	31.86	32.45	33.04	33.63
119...	29.75	30.34	30.94	31.53	32.13	32.72	33.32	33.91
120...	30.00	30.60	31.20	31.80	32.40	33.00	33.60	34.20
121...	30.25	30.85	31.46	32.06	32.67	33.27	33.88	34.48
122...	30.50	31.11	31.72	32.23	32.94	33.55	34.16	34.77
123...	30.75	31.36	31.98	32.59	33.21	33.82	34.44	35.05
124...	31.00	31.62	32.24	32.86	33.48	34.10	34.72	35.34
125...	31.25	31.87	32.50	33.12	33.75	34.37	35.00	35.62
126...	31.50	32.13	32.76	33.39	34.02	34.65	35.28	35.91
127...	31.75	32.38	33.02	33.65	34.29	34.92	35.56	36.19
128...	32.00	32.64	33.28	33.92	34.56	35.20	35.84	36.48
129...	32.25	32.89	33.54	34.18	34.83	35.47	36.12	36.76
130...	32.50	33.15	33.80	34.45	35.10	35.75	36.40	37.05
131...	32.75	33.40	34.06	34.71	35.37	36.02	36.68	37.33

True per cent. of proof.	WINE-GALLONS.							
	25	25½	26	26½	27	27½	28	28½
132...	33.00	33.66	34.32	34.98	35.64	36.30	36.96	37.62
133...	33.25	33.91	34.58	35.24	35.91	36.57	37.24	37.90
134...	33.50	34.17	34.84	35.51	36.18	36.85	37.52	38.19
135...	33.75	34.42	35.10	35.77	36.45	37.12	37.80	38.47
136...	34.00	34.68	35.36	36.04	36.72	37.40	38.08	38.76
137...	34.25	34.93	35.62	36.30	36.99	37.67	38.36	39.04
138...	34.50	35.19	35.88	36.57	37.26	37.95	38.64	39.33
139...	34.75	35.44	36.14	36.83	37.53	38.22	38.92	39.61
140...	35.00	35.70	36.40	37.10	37.80	38.50	39.20	39.90
141...	35.25	35.95	36.66	37.36	38.07	38.77	39.48	40.18
142...	35.50	36.21	36.92	37.63	38.34	39.05	39.76	40.47
143...	35.75	36.46	37.18	37.89	38.61	39.32	40.04	40.75
144...	36.00	36.72	37.44	38.16	38.88	39.60	40.32	41.04
145...	36.25	36.97	37.70	38.42	39.15	39.87	40.60	41.32
146...	36.50	37.23	37.96	38.69	39.42	40.15	40.88	41.61
147...	36.75	37.48	38.22	38.95	39.69	40.42	41.16	41.89
148...	37.00	37.74	38.48	39.22	39.96	40.70	41.44	42.18
149...	37.25	37.99	38.74	39.48	40.23	40.97	41.72	42.46
150...	37.50	38.25	39.00	39.75	40.50	41.25	42.00	42.75
151...	37.75	38.50	39.26	40.01	40.77	41.52	42.28	43.03
152...	38.00	38.76	39.52	40.28	41.04	41.80	42.56	43.32
153...	38.25	39.01	39.78	40.54	41.31	42.07	42.84	43.60
154...	38.50	39.27	40.04	40.81	41.58	42.35	43.12	43.89
155...	38.75	39.52	40.30	41.07	41.85	42.62	43.40	44.17
156...	39.00	39.78	40.56	41.34	42.12	42.90	43.68	44.46
157...	39.25	40.03	40.82	41.60	42.39	43.17	43.96	44.74
158...	39.50	40.29	41.08	41.87	42.66	43.45	44.24	45.03
159...	39.75	40.54	41.34	42.13	42.93	43.72	44.52	45.31
160...	40.00	40.80	41.60	42.40	43.20	44.00	44.80	45.60

True per cent. of proof.	WINE-GALLONS.							
	29	29½	30	30½	31	31½	32	32½
40....	11.60	11.80	12.00	12.20	12.40	12.60	12.80	13.00
41....	11.89	12.09	12.30	12.50	12.71	12.91	13.12	13.32
42....	12.18	12.39	12.60	12.81	13.02	13.23	13.44	13.65
43....	12.47	12.68	12.90	13.11	13.33	13.54	13.76	13.97
44....	12.76	12.98	13.20	13.42	13.64	13.86	14.08	14.30
45....	13.05	13.27	13.50	13.72	13.95	14.17	14.40	14.62
46....	13.34	13.57	13.80	14.03	14.26	14.49	14.72	14.95
47....	13.63	13.86	14.10	14.33	14.57	14.80	15.04	15.27
48....	13.92	14.16	14.40	14.64	14.88	15.12	15.36	15.60
49....	14.21	14.45	14.70	14.94	15.19	15.43	15.68	15.92
50....	14.50	14.75	15.00	15.25	15.50	15.75	16.00	16.25
51....	14.79	15.04	15.30	15.55	15.81	16.06	16.32	16.57
52....	15.08	15.34	15.60	15.86	16.12	16.38	16.64	16.90
53....	15.37	15.63	15.90	16.16	16.43	16.69	16.96	17.22
54....	15.66	15.93	16.20	16.47	16.74	17.01	17.28	17.55
55....	15.95	16.22	16.50	16.77	17.05	17.32	17.60	17.87
56....	16.24	16.52	16.80	17.08	17.36	17.64	17.92	18.20
57....	16.53	16.81	17.10	17.38	17.67	17.95	18.24	18.52
58....	16.82	17.11	17.40	17.69	17.98	18.27	18.56	18.85
59....	17.11	17.40	17.70	17.99	18.29	18.58	18.88	19.17
60....	17.40	17.70	18.00	18.30	18.60	18.90	19.20	19.50
61....	17.69	17.99	18.30	18.60	18.91	19.21	19.52	19.82
62....	17.98	18.29	18.60	18.91	19.22	19.53	19.84	20.15
63....	18.27	18.58	18.90	19.21	19.53	19.84	20.16	20.47
64....	18.56	18.88	19.20	19.52	19.84	20.16	20.48	20.80
65....	18.85	19.17	19.50	19.82	20.15	20.47	20.80	21.12
66....	19.14	19.47	19.80	20.13	20.46	20.79	21.12	21.45
67....	19.43	19.76	20.10	20.43	20.77	21.10	21.44	21.77
68....	19.72	20.06	20.40	20.74	21.08	21.42	21.76	22.10
69....	20.01	20.35	20.70	21.05	21.39	21.73	22.08	22.42
70....	20.30	20.65	21.00	21.35	21.70	22.05	22.40	22.75
71....	20.59	20.94	21.30	21.66	22.01	22.36	22.72	23.07
72....	20.88	21.24	21.60	21.96	22.32	22.68	23.04	23.40
73....	21.17	21.53	21.90	22.27	22.63	22.99	23.36	23.72
74....	21.46	21.83	22.20	22.57	22.94	23.31	23.68	24.05
75....	21.75	22.12	22.50	22.88	23.25	23.62	24.00	24.37
76....	22.04	22.42	22.80	23.18	23.56	23.94	24.32	24.70
77....	22.33	22.70	23.10	23.49	23.87	24.25	24.64	25.02
78....	22.62	23.01	23.40	23.79	24.18	24.57	24.96	25.35
79....	22.91	23.30	23.70	24.10	24.49	24.88	25.28	25.67
80....	23.20	23.60	24.00	24.40	24.80	25.20	25.60	26.00
81....	23.49	23.89	24.30	24.70	25.11	25.51	25.92	26.32
82....	23.78	24.19	14.60	25.01	25.42	25.83	26.24	26.65
83....	24.07	24.48	24.90	25.31	25.73	26.14	26.56	26.97
84....	24.36	24.78	25.20	25.62	26.04	26.46	26.88	27.30
85....	24.65	25.07	25.50	25.92	26.35	26.77	27.20	27.62

True per cent. of proof.	WINE-GALLONS.							
	29	29½	30	30½	31	31½	32	32½
86...	24.94	25.37	25.80	26.23	26.66	27.09	27.52	27.95
87...	25.23	25.66	26.10	26.53	26.97	27.40	27.84	28.27
88...	25.52	25.96	26.40	26.84	27.28	27.72	28.16	28.60
89...	25.81	26.25	26.70	27.14	27.59	28.03	28.48	28.92
90...	26.10	26.55	27.00	27.45	27.90	28.35	28.80	29.25
91...	26.39	26.84	27.30	27.75	28.21	28.66	29.12	29.57
92...	26.68	27.14	27.60	28.06	28.52	28.98	29.44	29.90
93...	26.97	27.43	27.90	28.36	28.83	29.29	29.76	30.22
94...	27.26	27.73	28.20	28.67	29.14	29.61	30.08	30.55
95...	27.55	28,02	28.50	28.97	29.45	29.92	30.40	30.87
96...	27.84	28.32	28.80	29.28	29.76	30.24	30.72	31.20
97...	28.13	28.61	29.10	29.58	30.07	30.55	31.04	31.53
98...	28.42	28.91	29.40	29.89	30.38	30.87	31.36	31.85
99...	28.71	29.20	29.70	30.19	30.69	31.18	31.68	32.18
100...	29.00	29.50	30.00	30.50	31.00	31.50	32.00	32.50
101...	29.29	29.79	30.30	30.80	31.31	31.81	32.32	32.83
102...	29.58	30.09	30.60	31.11	31.62	32.13	32.64	33.15
103...	29.87	30.38	30.90	31.41	31.93	32.44	32.96	33.48
104...	30.16	30.68	31.20	31.72	32.24	32.76	33.28	33.80
105...	30.45	30.97	31.50	32.02	32.55	33.07	33.60	34.13
106...	30.74	31.27	31.80	32.33	32.86	33.39	33.92	34.45
107...	31.03	31.56	32.10	32.63	33.17	33.70	34.24	34.78
108...	31.32	31.86	32.40	32.94	33.48	34.02	34.56	35.10
109...	31.61	32.15	32.70	33.24	33.79	34.33	34.88	35.43
110...	31.90	32.45	33.00	33.55	34.10	34.65	35.20	35.75
111...	32.19	32.74	33.30	33.85	34.41	34.96	35.52	36.08
112...	32.48	33.04	33.60	34.16	34.72	35.28	35.84	36.40
113...	32.77	33.33	33.90	34.46	35.03	35.59	36.16	36.73
114...	33.06	33.63	34.20	34.77	35.34	35.91	36.48	37.05
115...	33.35	33.92	34.50	35.07	35.65	36.22	36.80	37.38
116...	33.64	34.22	34.80	35.38	35.96	36.54	37.12	37.70
117...	33.93	34.51	35.10	35.68	36.27	36.85	37.44	38.03
118...	34.22	34.81	35.40	35.99	36.58	37.17	37.76	38.35
119...	34.51	35.10	35.70	36.29	36.89	37.48	38.08	38.68
120...	34.80	35.40	36.00	36.60	37.20	37.80	38.40	39.00
121...	35.09	35.69	36.30	36.90	37.51	38.11	38.72	39.32
122...	35.38	35.99	36.60	37.21	37.82	38.43	39.04	39.65
123...	35.67	36.28	36.90	37.51	38.13	38.74	39.36	39.97
124...	35.96	36.58	37.20	37.82	38.44	39.06	39.68	40.30
125...	36.25	36.87	37.50	38.12	38.75	39.37	40.00	40.62
126...	36.54	37.17	37.80	38.43	39.06	39.69	40.32	40.95
127...	36.83	37.46	38.10	38.73	39.37	40.00	40.64	41.27
128...	37.12	37.76	38.40	39.04	39.68	40.32	40.96	41.60
129...	37.41	38.05	38.70	39.34	39.99	40.63	41.28	41.92
130...	37.70	38.35	39.00	39.65	40.30	40.95	41.60	42.25
131...	37.99	38.64	39.30	39.95	40.61	41.26	41.92	42.57

True per cent. of proof.	WINE-GALLONS.							
	29	29½	30	30½	31	31½	32	32½
132...	38.28	38.94	39.60	40.26	41.92	41.58	42.24	42.90
133...	38.57	39.23	39 90	40.56	41.23	41.89	42.56	43.22
134...	38.86	39.53	40.20	40.87	41.54	42.21	42.88	43.55
135...	39.15	39.82	40.50	41.17	41.85	42.52	43.20	43.87
136...	39.44	40.12	40.80	41.48	42.16	42.84	43.52	44.20
137...	39.73	40.41	40.10	41.78	42.47	43.15	43.84	44.52
138...	40.02	40.71	41.40	42.09	42.78	43.47	44.16	44.85
139...	40.31	41.00	41.70	42.39	43.09	43.78	44.48	45.17
140...	40.60	41.30	42.00	42.70	43.40	44.10	44.80	45.50
141...	40.89	41.59	42.30	43.00	43.71	44.41	45.12	45.82
142...	41.18	41.89	42.60	43.31	44.02	44.73	45.44	46.15
143...	41.47	42.18	42.90	43.61	44.33	45.04	45.76	46.47
144...	41.76	42.48	43.20	43.92	44.64	45.36	46.08	46.80
145...	42.05	42.77	43.50	44.22	44.95	45.67	46.40	47.12
146...	42.34	43.07	43.80	44.53	45.26	45.99	46.72	47.45
147...	42.63	43.36	44.10	44.83	45.57	46.30	47.04	47.77
148...	42.92	43.66	44.40	45.14	45.88	46.62	47.36	48.10
149...	43.21	43.95	44.70	45.44	46.19	46.93	47.68	48.42
150...	43.50	44.25	45.00	45.75	46.50	47.25	48.00	48.75
151...	43.79	44.54	45.30	46.05	46.81	47.56	48.32	49.07
152...	44.08	44.84	45.60	46.36	47.12	47.88	48.64	49.40
153 ..	44.37	45.13	45.90	46.66	47.43	48.19	48.96	49.72
154...	44.66	45.43	46.20	46.97	47.74	48.51	49.28	50.05
155...	44.95	45.72	46.50	47.27	48.05	48.82	49.60	50.37
156...	45.24	46.02	46.80	47.58	48.36	49.14	49.92	50.70
157...	45.53	46.31	47.10	47.88	48.67	49.45	50.24	51.02
158...	45.82	46.61	47.40	48.19	48.98	49.77	50.56	51.35
159...	46.11	46.90	47.70	48.49	49.29	50.08	50.88	51.67
160...	46.40	47.20	48.00	48.80	49.60	50.40	51.20	52.00

True per cent. of proof.	WINE-GALLONS.							
	33	33½	34	34½	35	35½	36	36½
40	13.20	13.40	13.60	13.80	14.00	14.20	14.40	14.60
41	13.53	13.73	13.94	14.14	14.35	14.55	14.76	14.96
42	13.86	14.07	14 28	14.49	14.70	14.91	15.12	15.33
43	14.19	14.40	14.62	14.83	15.05	15.26	15.48	15.69
44	14.52	14.74	14.95	15.18	15.40	15.62	15.84	16.06
45	14.85	15.07	15.30	15.52	15.75	15.97	16.20	16.42
46	15.18	15.41	15.64	15.87	16.10	16.33	16.56	16.79
47	15.51	15.74	15.98	16.21	16.45	16.68	16.92	17.15
48	15.84	16.08	16.32	16.56	16.80	17.04	17.28	17.52
49	16.17	16.41	16.66	16.90	17.15	17.39	17.64	17.88
50	16.50	16.75	17.00	17.25	17.50	17.75	18.00	18.25
51	16.83	17.08	17.34	17.59	17.85	18.10	18.36	18.61
52	17.16	17.42	17.68	17.94	18.20	18.46	18.72	18.98
53	17.49	17.75	18.02	18.28	18.55	18.81	19.08	19.34
54	17.82	18.09	18.36	18.63	18.90	19.17	19.44	19.71
55	18.15	18.42	18.70	18.97	19.25	19.52	19.80	20.07
56	18.48	18.76	19.04	19.32	19.60	19.88	20.16	20.44
57	18.81	19.09	19.38	19.66	19.95	20.23	20.52	20.81
58	19.14	19.43	19.72	20.01	20.30	20.59	20.88	21.17
59	19.47	19.76	20.06	20.35	20.65	20.94	21.24	21.54
60	19.80	20.10	20.40	20.70	21.00	21.30	21.60	21.90
61	20.13	20.43	20.74	21.04	21.35	21.65	21.96	22.27
62	20.46	20.77	21.08	21.39	21.70	22.01	22.32	22.63
63	20.79	21.10	21.42	21.73	22.05	22.36	22.68	23.00
64	21.12	21.44	21.76	22.08	22.40	22.72	23.04	23.36
65	21.45	21.77	22.10	22.42	22.75	23.07	23.40	23.73
66	21.78	22.11	22.44	22.77	23.10	23.43	23.76	24.09
67	22.11	22.44	22.78	23.11	23.45	23.78	24.12	24.46
68	22.44	22.78	23.12	23.46	23.80	24.14	24.48	24.82
69	22.77	23.11	23.46	23.80	24.15	24.49	24.84	25.19
70	23.10	23.45	23.80	24.15	24.50	24.85	25.20	25.55
71	23.43	23.78	24.14	24.49	24.85	25.20	25.56	25.92
72	23.76	24.12	24.48	24.84	25.20	25.56	25.92	26.28
73	24.09	24.45	24.82	25.18	25.55	25.91	26.28	26.65
74	24.42	24.79	25.16	25.53	25.90	26.27	26.64	27.01
75	24.75	25.12	25.50	25.87	26.25	26.62	27.00	27.38
76	25.08	25.46	25.84	26.22	26.60	26.98	27.36	27.74
77	25.41	25.79	26.18	26.56	26.95	27.33	27.72	28.11
78	25.74	26.13	26.52	26.91	27.30	27.69	28.08	28.47
79	26.07	26.46	26.86	27.25	27.65	28.04	28.44	28.84
80	26.40	26.80	27.20	27.60	28.00	28.40	28.80	29.20
81	26.73	27.13	27.54	27.94	28.35	28.75	29.16	29.56
82	27.06	27.47	27.88	28.29	28.70	29.11	29.52	29.93
83	27.39	27.80	28.22	28.63	29.05	29.46	29.88	30.29
84	27.72	28.14	28.56	28.98	29.40	29.82	30.24	30.66
85	28.05	28.47	28.90	29.32	29.75	30.17	30.60	31.02

True per cent. of proof.	WINE-GALLONS.							
	33	33½	34	34½	35	35½	36	36½
86...	28.38	28.81	29.24	29.67	30.10	30.53	30.96	31.39
87...	28.71	29.14	29.58	30.01	30.45	30.88	31.32	31.75
88...	29.04	29.48	29.92	30.36	30.80	31.24	31.68	32.12
89...	29.37	29.81	30.26	30.70	31.15	31.59	32.04	32.48
90...	29.70	30.15	30.60	31.05	31.50	31.95	32.40	32.85
91 ..	30.03	30.48	30.94	31.39	31.85	32.30	32.76	33.21
92...	30.36	30.82	31.28	31.74	32.20	32.66	33.12	33.58
93...	30.69	31.15	31.62	32.08	32.55	33.01	33.48	33.94
94...	31.02	31.49	31.96	32.43	32.90	33.37	33.84	34.31
95...	31.35	31.82	32.30	32.77	33.25	33.72	34.20	34.67
96...	31.68	32.16	32.64	33.12	33.60	34.08	34.56	35.04
97...	32.01	32.49	32.98	33.46	33.95	34.43	34.92	35.40
98...	32.34	32.83	33.32	33.81	34.30	34.79	35.28	35.77
99...	32.67	33.16	33.66	34.15	34.65	35.14	35.64	36.13
100...	33.00	33.50	34.00	34.50	35.00	35.50	36.00	36.50
101...	33.33	33.83	34.34	34.84	35.35	35.85	36.36	36.86
102...	33.66	34.17	34.68	35.19	35.70	36.21	36.72	37.23
103...	33.99	34.50	35.02	35.53	36.05	36.56	37.08	37.59
104...	34.32	34.84	35.36	35.88	36.40	36.92	37.44	37.96
105...	34.65	35.17	35.70	36.22	36.75	37.27	37.80	38.32
106...	34.98	35.51	36.04	36.57	37.10	37.63	38.16	38.69
107...	35.31	35.84	36.38	36.91	37.45	37.98	38.52	39.05
108...	35.64	36.18	36.72	37.26	37.80	38.34	38.88	39.42
109...	35.97	36.51	37.06	37.60	38.15	38.69	39.24	39.78
110...	36.30	36.85	37.40	37.95	38.50	39.05	39.60	40.15
111...	36.63	37.18	37.74	38.29	38.85	39.40	39.96	40.51
112...	36.96	37.52	38.08	38.64	39.20	39.76	40.32	40.88
113...	37.29	37.85	38.42	38.98	39.55	40.11	40.68	41.24
114...	37.62	38.19	38.76	39.33	39.90	40.47	41.04	41.61
115...	37.95	38.52	39.10	39.67	40.25	40.82	41.40	41.97
116...	38.28	38.86	39.44	40.02	40.60	41.18	41.76	42.34
117...	38.61	39.19	39.78	40.36	40.95	41.53	42.12	42.70
118...	38.94	39.53	40.12	40.71	41.30	41.89	42.48	43.07
119...	39.27	39.86	40.46	41.05	41.65	42.24	42.84	43.43
120...	39.60	40.20	40.80	41.40	42.00	42.60	43.20	43.80
121...	39.93	40.53	41.14	41.74	42.35	42.95	43.56	44.16
122...	40.26	40.87	41.48	42.09	42.70	43.31	43.92	44.53
123...	40.59	41.20	41.82	42.43	43.05	43.66	44.28	44.89
124...	40.92	41.54	42.16	42.78	43.40	44.02	44.64	45.26
125...	41.25	41.87	42.50	43.12	43.75	44.37	45.00	45.62
126...	41.58	42.21	42.84	43.47	44.10	44.73	45.36	45.99
127...	41.91	42.54	43.18	43.81	44.45	45.08	45.72	46.35
128...	42.24	42.88	43.52	44.16	44.80	45.44	46.08	46.72
129...	42.67	43.21	43.86	44.50	45.15	45.79	46.44	47.08
130...	43.00	43.55	44.20	44.85	45.50	46.15	46.80	47.45
131...	43.33	43.88	44.54	45.19	45.85	46.50	47.16	47.81

True per cent. of proof.	WINE-GALLONS.							
	33	33½	34	34½	35	35½	36	36½
132...	43.66	44.22	44.88	45.54	46.20	46.86	47.52	48.18
133...	43.99	44.55	45.22	45.88	46.55	47.21	47.88	48.54
134...	44.32	44.89	45.56	46.23	46.90	47.57	48.24	48.91
135...	44.65	45.22	45.90	46.57	47.25	47.92	48.60	49.27
136...	44.98	45.56	46.24	46.92	47.60	48.28	48.96	49.64
137...	45.31	45.89	46.58	47.26	47.95	48.63	49.32	50.00
138...	45.64	46.23	46.92	47.61	48.30	48.99	49.68	50.37
139...	45.97	46.56	47.26	47.95	48.65	49.34	50.04	50.73
140...	46.20	46.90	47.60	48.30	49.00	49.70	50.40	51.10
141...	46.53	47.23	47.94	48.64	49.35	50.05	50.76	51.46
142...	46.86	47.57	48.28	48.99	49.70	50.41	51.12	51.83
143...	47.19	47.90	48.62	49.33	50.05	50.76	51.48	52.19
144...	47.52	48.24	48.96	49.68	50.40	51.12	51.84	52.56
145...	47.85	48.57	49.30	50.02	50.75	51.47	52.20	52.92
146...	48.18	48.91	49.64	50.37	51.10	51.83	52.56	53.29
147...	48.51	49.24	49.98	50.71	51.45	52.18	52.92	53.65
148...	48.84	49.58	50.32	51.06	51.80	52.54	53.28	54.02
149...	49.17	49.91	50.66	51.40	52.15	52.90	53.64	54.38
150...	49.50	50.25	51.00	51.75	52.50	53.25	54.00	54.75
151...	49.83	50.58	51.34	52.09	52.85	53.61	54.36	55.11
152...	50.16	50.92	51.68	52.44	53.20	53.96	54.72	55.48
153...	50.49	51.25	52.02	52.78	53.55	54.32	55.08	55.84
154...	50.82	51.59	52.36	53.13	53.90	54.67	55.44	56.21
155...	51.15	51.92	52.70	53.47	54.25	55.03	55.80	56.57
156...	51.48	52.26	53.04	53.82	54.60	55.38	56.16	56.94
157...	51.81	52.59	53.38	54.16	54.95	55.74	56.52	57.30
158...	52.14	52.93	53.72	54.51	55.30	56.09	56.88	57.67
159...	52.47	53.26	54.06	54.85	55.65	56.45	57.24	58.03
160...	52.80	53.60	54.40	55.20	56.00	56.80	57.60	58.40

True per cent. of proof.	WINE-GALLONS.							
	37	37½	38	38½	39	39½	40	40½
40	14.80	15.00	15.20	15.40	15.60	15.80	16.00	16.20
41	15.17	15.37	15.58	15.78	15.99	16.19	16.40	16.60
42	15.54	15.75	15.96	16.17	16.38	16.59	16.80	17.01
43	15.91	16.12	16.34	16.55	16.77	16.98	17.20	17.41
44	16 28	16.50	16.72	16.94	17.16	17.38	17.60	17.82
45	16.65	16.87	17.10	17.32	17.55	17.77	18.00	18.22
46	17.02	17.25	17.48	17.71	17.94	18.17	18.40	18.63
47	17.39	17.62	17.86	18.09	18.33	18.56	18.80	19.03
48	17.76	18.00	18.24	18.48	18.72	18.96	19.20	19.44
49	18.13	18.37	18.62	18.86	19.11	19.35	19.60	19.84
50	18.50	18.75	19.00	19.25	19.50	19.75	20.00	20.25
51	18.87	19.12	19.38	19.63	19.89	20.14	20.40	20.65
52	19.24	19.50	19.76	20.02	20.28	20.54	20.80	21.06
53	19.61	19.87	20.14	20.40	20.67	20.93	21.20	21.46
54	19.98	20.25	20.52	20.79	21.06	21.33	21.60	21.87
55	20.35	20.62	20.90	21.17	21.45	21.72	22.00	22.27
56	20.72	21.00	21.28	21.56	21.84	22.12	22.40	22.68
57	21.09	21.37	21.66	21.94	22.23	22.51	22.80	23.08
58	21.46	21.75	22.04	22.33	22.62	22.91	23.20	23.49
59	21.83	22.12	22.42	22.71	23.01	23.30	23.60	23.89
60	22.20	22.50	22.80	23.10	23.40	23.70	24.00	24.30
61	22.57	22.87	23.18	23.48	23.79	24.09	24.40	24.70
62	22.94	23.25	23.56	23.87	24.18	24.49	24.80	25.11
63	23.31	23.62	23.94	24.25	24.57	24.88	25.20	25.51
64	23.68	24.00	24.32	24.64	24.96	25.28	25.60	25.92
65	24.05	24.37	24.70	25.02	25.35	25.67	26.00	26.32
66	24.42	24.75	25.08	25.41	25.74	26.07	26.40	26.73
67	24.79	25.12	25.46	25.79	26.13	26.46	26.80	27.13
68	25.16	25.50	25.84	26.18	26.52	26.86	27.20	27.54
69	25.53	25.87	26.22	26.56	26.91	27.25	27.60	27.94
70	25.90	26.25	26.60	26.95	27.30	27.65	28.00	28.35
71	26.27	26.62	26.98	27.33	27.69	28.04	28.40	28.75
72	26.64	27.00	27.36	27.72	28.08	28.44	28.80	29.16
73	27.01	27.37	27.74	28.10	28.47	28.83	29.20	29.56
74	27.38	27.75	28.12	28.49	28.86	29.23	29.60	29.97
75	27.75	28.12	28.50	28.87	29.25	29.62	30.00	30.37
76	28.12	28.50	28.88	29.26	29.64	30.02	30.40	30.78
77	28.49	28.87	29.26	29.64	30.03	30.41	30.80	31.18
78	28.86	29.25	29.64	30.03	30.42	30.81	31.20	31.59
79	29.23	29.62	30.02	30.41	30.81	31.20	31.60	31.99
80	29.60	30.00	30.40	30.80	31.20	31.60	32.00	32.40
81	29.97	30.37	30.78	31.18	31.59	31.99	32.40	32.80
82	30.34	30.75	31.16	31.57	31.98	32.39	32.80	33.21
83	30.71	31.12	31.54	31.95	32.37	32.78	33.20	33.61
84	31.08	31.50	31.92	32.34	32.76	33.18	33.60	34.02
85	31.45	31.87	32.30	32.72	33.15	33.57	34.00	34.42

True per cent. of proof.	WINE-GALLONS.							
	37	37½	38	38½	39	39½	40	40½
86...	31.82	32.25	32.68	33.11	33.54	33.97	34.40	34.83
87...	32.19	32.62	33.06	33.49	33.93	34.36	34.80	35.23
88...	32.56	33.00	33.44	33.88	34.32	34.76	35.20	35.64
89...	32.93	33.37	33.82	34.26	34.71	35.15	35.60	36.04
90...	33.30	33.75	34.20	34.65	35.10	35.55	36.00	36.45
91...	33.67	34.12	34.58	35.03	35.49	35.94	36.40	36.85
92...	34.04	34.50	34.96	35.42	35.88	36.34	36.80	37.26
93...	34.41	34.87	35.34	35.80	36.27	36.73	37.20	37.66
94...	34.78	35.25	35.72	36.19	36.66	37.13	37.60	38.07
95...	35.15	35.62	36.10	36.57	37.05	37.52	38.00	38.47
96...	35.52	36.00	36.48	36.96	37.44	37.92	38.40	38.88
97...	35.89	36.37	36.86	37.34	37.83	38.31	38.80	39.28
98...	36.26	36.75	37.24	37.73	38.22	38.71	39.20	39.69
99...	36.63	37.12	37.62	38.11	38.61	39.10	39.60	40.09
100...	37.00	37.50	38.00	38.50	39.00	39.50	40.00	40.50
101...	37.37	37.87	38.38	38.88	39.39	39.89	40.40	40.90
102...	37.74	38.25	38.76	39.27	39.78	40.29	40.80	41.31
103...	38.11	38.62	39.14	39.65	40.17	40.68	41.20	41.71
104...	38.48	39.00	39.52	40.04	40.56	41.08	41.60	42.12
105...	38.85	39.37	39.90	40.42	40.95	41.47	42.00	42.52
106...	39.22	39.75	40.28	40.81	41.34	41.87	42.40	42.93
107...	39.59	40.12	40.66	41.19	41.73	42.26	42.80	43.33
108...	39.96	40.50	41.04	41.58	42.12	42.66	43.20	43.74
109...	40.33	40.87	41.42	41.96	42.51	43.05	43.60	44.14
110...	40.70	41.25	41.80	42.35	42.90	43.45	44.00	44.55
111...	41.07	41.62	42.18	42.73	43.29	43.84	44.40	44.95
112...	41.44	42.00	42.56	43.12	43.68	44.24	44.80	45.36
113...	41.81	42.37	42.94	43.50	44.07	44.63	45.20	45.76
114...	42.18	42.75	43.32	43.89	44.46	45.03	45.60	46.17
115...	42.55	43.12	43.70	44.27	44.85	45.42	46.00	46.57
116...	42.92	43.50	44.08	44.66	45.24	45.82	46.40	46.98
117...	43.29	43.87	44.46	45.04	45.63	46.21	46.80	47.38
118...	43.66	44.25	44.84	45.43	46.02	46.61	47.20	47.79
119...	44.03	44.62	45.22	45.81	46.41	47.00	47.60	48.19
120...	44.40	45.00	45.60	46.20	46.80	47.40	48.00	48.60
121...	44.77	45.37	45.98	46.58	47.19	47.79	48.40	49.00
122...	45.14	45.75	46.36	46.97	47.58	48.19	48.80	49.41
123...	45.51	46.12	46.74	47.35	47.97	48.58	49.20	49.81
124...	45.88	46.50	47.12	47.74	48.36	48.98	49.60	50.22
125...	46.25	46.87	47.50	48.12	48.75	49.37	50.00	50.62
126...	46.62	47.25	47.88	48.51	49.14	49.77	50.40	51.03
127...	46.99	47.62	48.26	48.89	49.53	50.16	50.80	51.43
128...	47.36	48.00	48.64	49.28	49.92	50.56	51.20	51.84
129...	47.73	48.37	49.02	49.66	50.31	50.95	51.60	52.24
130...	48.10	48.75	49.40	50.05	50.70	51.35	52.00	52.65
131...	48.47	49.12	49.78	50.43	51.09	51.74	52.40	53.05

True per cent. of proof.	WINE-GALLONS.							
	37	37½	38	38½	39	39½	40	40½
132...	48.84	49.50	50.16	50.82	51.48	52.14	52.80	53.46
133...	49.21	49.87	50.54	51.20	51.87	52.53	53.20	53.86
134...	49.58	50.25	50.92	51.59	52.26	52.93	53.60	54.27
135...	49.95	50.62	51.30	51.97	52.65	53.32	54.00	54.67
136...	50.32	51.00	51.68	52.36	53.04	53.72	54.40	55.08
137...	50.69	51.37	52.06	52.74	53.43	54.11	54.80	55.48
138...	51.06	51.75	52.44	53.13	53.82	54.51	55.20	55.89
139...	51.43	52.12	52.82	53.51	54.21	54.90	55.60	56.29
140...	51.80	52.50	53.20	53.90	54.60	55.30	56.00	56.70
141...	52.17	52.87	53.58	54.28	54.99	55.69	56.40	57.10
142...	52.54	53.25	53.96	54.67	55.38	56.09	56.80	57.51
143...	52.91	53.62	54.34	55.05	55.77	56.48	57.20	57.91
144...	53.28	54.00	54.72	55.44	56.16	56.88	57.60	58.32
145...	53.65	54.37	55.10	55.82	56.55	57.27	58.00	58.72
146...	54.02	54.75	55.48	56.21	56.94	57.67	58.40	59.13
147...	54.39	55.12	55.86	56.59	57.33	58.06	58.80	59.53
148...	54.76	55.50	56.24	56.98	57.72	58.46	59.20	59.94
149...	55.13	55.87	56.62	57.36	58.11	58.85	59.60	60.34
150...	55.50	56.25	57.00	57.75	58.50	59.25	60.00	60.75
151...	55.87	56.62	57.38	58.13	58.89	59.64	60.40	61.15
152...	56.24	57.00	57.76	58.52	59.28	60.04	60.80	61.56
153...	56.61	57.37	58.14	58.90	59.67	60.43	61.20	61.96
154...	56.98	57.75	58.52	59.29	60.06	60.83	61.60	62.37
155...	57.35	58.12	58.90	59.67	60.45	61.22	62.00	62.77
156...	57.72	58.50	59.28	60.06	60.84	61.62	62.40	63.18
157...	58.09	58.87	59.66	60.44	61.23	62.01	62.80	63.58
158...	58.46	59.25	60.04	60.83	61.62	62.41	63.20	63.99
159...	58.83	59.62	60.42	61.21	62.01	62.80	63.60	64.39
160...	59.20	60.00	60.80	61.60	62.40	63.20	64.00	64.80

True per cent. of proof.	WINE-GALLONS.							
	41	41½	42	42½	43	43½	44	44½
40	16.40	16.60	16.80	17.00	17.20	17.40	17.60	17.80
41	16.81	17.01	17.22	17.42	17.63	17.83	18.04	18.24
42	17.22	17.43	17.64	17.85	18.06	18.27	18.48	18.69
43	17.63	17.84	18.06	18.27	18.49	18.70	18.92	19.13
44	18.04	18.26	18.48	18.70	18.92	19.14	19.36	19.58
45	18.45	18.67	18.90	19.12	19.35	19.57	19.80	20.02
46	18.86	19.09	19.32	19.55	19.78	20.01	20.24	20.47
47	19.27	19.50	19.74	19.97	20.21	20.44	20.68	20.91
48	19.68	19.92	20.16	20.40	20.64	20.88	21.12	21.36
49	20.09	20.33	20.58	20.82	21.07	21.31	21.56	21.80
50	20.50	20.75	21.00	21.25	21.50	21.75	22.00	22.25
51	20.91	21.16	21.42	21.67	21.93	22.18	22.44	22.69
52	21.32	21.58	21.84	22.10	22.36	22.62	22.88	23.14
53	21.73	21.99	22.26	22.52	22.79	23.05	23.32	23.58
54	22.14	22.41	22.68	22.95	23.22	23.49	23.76	24.03
55	22.55	22.82	23.10	23.37	23.65	23.92	24.20	24.47
56	22.96	23.24	23.52	23.80	24.08	24.36	24.64	24.92
57	23.37	23.65	23.94	24.22	24.51	24.79	25.08	25.36
58	23.78	24.07	24.36	24.65	24.94	25.23	25.52	25.81
59	24.19	24.48	24.78	25.07	25.37	25.66	25.96	26.25
60	24.60	24.90	25.20	25.50	25.80	26.10	26.40	26.70
61	25.01	25.31	25.62	25.92	26.23	26.53	26.84	27.14
62	25.42	25.73	26.04	26.35	26.66	26.97	27.28	27.59
63	55.83	26.14	26.46	26.77	27.09	27.40	27.72	28.03
64	26.24	26.56	26.88	27.20	27.52	27.84	28.16	28.48
65	26.65	26.97	27.30	27.62	27.95	28.27	28.60	28.92
66	27.06	27.39	27.72	28.05	28.38	28.71	29.04	29.37
67	27.47	27.80	28.14	28.47	28.81	29.14	29.48	29.81
68	27.88	28.22	28.56	28.90	29.24	29.58	29.92	30.26
69	28.29	28.63	28.98	29.32	29.67	30.01	30.36	30.70
70	28.70	29.05	29.40	29.75	30.10	30.45	30.80	31.15
71	29.11	29.46	29.82	30.17	30.53	30.88	31.24	31.59
72	29.52	29.88	30.24	30.60	30.96	31.32	31.68	32.04
73	29.93	30.29	30.66	31.02	31.39	31.75	32.12	32.48
74	30.34	30.71	31.08	31.45	31.82	32.19	32.56	32.93
75	30.75	31.12	31.50	31.87	32.25	32.62	33.00	33.37
76	31.16	31.54	31.92	32.30	32.68	33.05	33.44	33.82
77	31.57	31.95	32.34	32.72	33.11	33.49	33.88	34.26
78	31.98	32.37	32.76	33.15	33.54	33.93	34.32	34.71
79	32.39	32.78	33.18	33.57	33.97	34.36	34.76	35.15
80	32.80	33.20	33.60	34.00	34.40	34.80	35.20	35.60
81	33.21	33.61	34.02	34.42	34.83	35.23	35.64	36.04
82	33.62	34.03	34.44	34.85	35.26	35.67	36.08	36.49
83	34.03	34.44	34.86	35.27	35.69	36.10	36.52	36.93
84	34.44	34.86	35.28	35.70	36.12	36.54	36.96	37.38
85	34.85	35.27	35.70	36.12	36.55	36.97	37.40	37.82

True per cent. of proof.	WINE-GALLONS.							
	41	41½	42	42½	43	43½	44	44½
86...	35.26	35.69	36.12	36.55	36.98	37.41	37.84	38.27
87...	35.67	36.10	36.54	36.97	37.41	37.84	38.28	38.71
88...	36.08	36.52	36.96	37.40	37.84	38.28	38.72	39.16
89...	36.49	36.93	37.38	37.82	38.27	38.71	39.16	39.60
90...	36.90	37.35	37.80	38.25	38.70	39.15	39.60	40.05
91...	37.31	37.76	38.22	38.67	39.13	39.58	40.04	40.49
92...	37.72	38.18	38.64	39.10	39.56	40.02	40.48	40.94
93...	38.13	38.59	39.06	39.52	39.99	40.45	40.92	41.38
94...	38.54	39.01	39.48	39.95	40.42	40.89	41.36	41.83
95...	38.95	39.42	39.90	40.37	40.85	41.32	41.80	42.27
96...	39.36	39.84	40.32	40.80	41.28	41.76	42.24	42.72
97...	39.77	40.25	40.74	41.22	41.71	42.19	42.68	43.16
98...	40.18	40.67	41.16	41.65	42.14	42.63	43.12	43.61
99...	40.59	41.08	41.58	42.07	42.57	43.06	43.56	44.05
100...	41.00	41.50	42.00	42.50	43.00	43.50	44.00	44.50
101...	41.41	41.91	42.42	42.92	43.43	43.93	44.44	44.94
102...	41.82	42.33	42.84	43.35	43.86	44.37	44.88	45.39
103...	42.23	42.74	43.26	43.77	44.29	44.80	45.32	45.83
104...	42.64	43.16	43.68	44.20	44.72	45.24	45.76	46.28
105 ..	43.05	43.57	44.10	44.62	45.15	45.67	46.20	46.72
106...	43.46	43.99	44.52	45.05	45.58	46.11	46.64	47.17
107...	43.87	44.40	44.94	45.47	46.01	46.54	47.08	47.61
108...	44.28	44.82	45.36	45.90	46.44	46.98	47.52	48.06
109...	44.69	45.23	45.78	46.32	46.87	47.41	47.96	48.50
110...	45.10	45.65	46.20	46.75	47.30	47.85	48.40	48.95
111...	45.51	46.06	46.62	47.17	47.73	48.28	48.84	49.39
112...	45.92	46.48	47.04	47.60	48.16	48.72	49.28	49.84
113...	46.33	46.89	47.46	48.02	48.59	49.15	49.72	50.28
114...	46.74	47.31	47.88	48.45	49.02	49.59	50.16	50.73
115...	47.15	47.72	48.30	48.87	49.45	50.02	50.60	51.17
116...	47.56	48.14	48.72	49.30	49.88	50.46	51.04	51.62
117...	47.97	48.55	49.14	49.72	50.31	50.89	51.48	52.06
118...	48.38	48.97	49.56	50.15	50.74	51.33	51.92	52.51
119...	48.79	49.38	49.98	50.57	51.17	51.76	52.36	52.95
120...	49.20	49.80	50.40	51.00	51.60	52.20	52.80	53.40
121...	49.61	50.21	50.82	51.42	52.03	52.63	53.24	53.84
122...	50.02	50.63	51.24	51.85	52.46	53.07	53.68	54.29
123...	50.43	51.04	51.66	52.27	52.89	53.50	54.12	54.73
124...	50.84	51.46	52.08	52.70	53.32	53.94	54.56	55.18
125...	51.25	51.87	52.50	53.12	53.75	54.37	55.00	55.62
126...	51.66	52.29	52.92	53.55	54.18	54.81	55.44	56.07
127...	52.07	52.70	53.34	53.97	54.61	55.24	55.88	56.51
128...	52.48	53.12	53.76	54.40	55.04	55.68	56.32	56.96
129...	52.89	53.53	54.18	54.82	55.47	56.11	56.76	57.40
130...	53.30	53.95	54.60	55.25	55.90	56.55	57.20	57.85
131...	53.71	54.36	55.02	55.67	56.33	56.98	57.64	58.29

True per cent. of proof.	WINE-GALLONS.							
	41	41½	42	42½	43	43½	44	44½
132...	54.12	54.78	55.44	56.10	56.76	57.42	58.08	58.74
133...	54.53	55.19	55.86	56.52	57.19	57.85	58.52	59.18
134...	54.94	55.61	56.28	56.95	57.62	58.29	58.96	59.63
135...	55.35	56.02	56.70	57.37	58.05	58.72	59.40	60.07
136...	55.76	56.44	57.12	57.80	58.48	59.16	59.84	60.52
137 ..	56.17	56.85	57.54	58.22	58.91	59.59	60.28	60.96
138...	56.58	57.27	57.96	58.65	59.34	60.03	60.72	61.41
139...	56.99	57.68	58.38	59.07	59.77	60.46	61.16	61.85
140...	57.40	58.10	58.80	59.50	60.20	60.90	61.60	62.30
141..	57.81	58.51	59.22	59.92	60.63	61.33	62.04	62.74
142...	58.22	58.93	59.64	60.35	61.06	61.77	62.48	63.19
143...	58.63	59.34	60.06	60.77	61.49	62.20	62.92	63.63
144...	59.04	59.76	60.48	61.20	61.92	62.64	63.36	64.08
145...	59.45	60.17	60.90	61.62	62.35	63.07	63.80	64.52
146...	59.86	60.59	61.32	62.05	62.78	63.51	64.24	64.97
147...	60.27	61.00	61.74	62.47	63.21	63.94	64.68	65.41
148...	60.68	61.42	62.16	62.90	63.64	64.38	65.12	65.86
149...	61.09	61.83	62.58	63.32	64.07	64.81	65.56	66.30
150...	61.50	62.25	63.00	63.75	64.50	65.25	66.00	66.75
151...	61.91	62.66	63.42	64.17	64.93	65.68	66.44	67.19
152...	62.32	63.08	63.84	64.60	65.36	66.12	66.88	67.64
153...	62.73	63.49	64.26	65.02	65.79	66.55	67.32	68.08
154...	63.14	63.91	64.68	65.45	66.22	66.99	67.76	68.53
155...	63.55	64.32	65.10	65.87	66.65	67.42	68.20	68.97
156...	63.96	64.74	65.52	66.30	67.08	67.86	68.64	69.42
157...	64.37	65.15	65.94	66.72	67.51	68.29	69.08	69.86
158...	64.78	65.57	66.36	67.15	67.94	68.73	69.52	70.31
159...	65.19	65.98	66.78	67.57	68.37	69.16	69.96	70.75
160...	65.60	66.40	67.20	68.00	68.80	69.60	70.40	71.20

True per cent. of proof.	WINE-GALLONS.							
	45	45½	46	46½	47	47½	48	48½
40	18.00	18.20	18.40	18.60	18.80	19.00	19.20	19.40
41	18.45	18.65	18.86	19.06	19.27	19.47	19.68	19.88
42	18.90	19.11	19.32	19.53	19.74	19.95	20.16	20.37
43	19.35	19.56	19.78	19.99	20.21	20.42	20.64	20.85
44	19.80	20.02	20.24	20.46	20.68	20.90	21.12	21.34
45	20.25	20.47	20.70	20.92	21.15	21.37	21.60	21.82
46	20.70	20.93	21.16	21.39	21.62	21.85	22.08	22.31
47	21.15	21.38	21.62	21.85	22.09	22.32	22.56	22.79
48	21.60	21.84	22.08	22.32	22.56	22.80	23.04	23.28
49	22.05	22.29	22.54	22.78	23.03	23.27	23.52	23.76
50	22.50	22.75	23.00	23.25	23.50	23.75	24.00	24.25
51	22.95	23.20	23.46	23.71	23.97	24.22	24.48	24.73
52	23.40	23.66	23.92	24.18	24.44	24.70	24.96	25.22
53	23.85	24.11	24.38	24.64	24.91	25.17	25.44	25.70
54	24.30	24.57	24.84	25.11	25.38	25.65	25.92	26.19
55	24.75	25.02	25.30	25.57	25.85	26.12	26.40	26.67
56	25.20	25.48	25.76	26.04	26.32	26.60	26.88	27.16
57	25.65	25.93	26.22	26.50	26.79	27.07	27.36	27.64
58	26.10	26.39	26.68	26.97	27.26	27.55	27.84	28.13
59	26.55	26.84	27.14	27.43	27.73	28.02	28.32	28.61
60	27.00	27.30	27.60	27.90	28.20	28.50	28.80	29.10
61	27.45	27.75	28.06	28.36	28.67	28.97	29.28	29.58
62	27.90	28.21	28.52	28.83	29.14	29.45	29.76	30.07
63	28.35	28.66	28.98	29.29	29.61	29.92	30.24	30.55
64	28.80	29.12	29.44	29.76	30.08	30.40	30.72	31.04
65	29.25	29.57	29.90	30.22	30.55	30.87	31.20	31.52
66	29.70	30.03	30.36	30.69	31.02	31.35	31.68	32.01
67	30.15	30.48	30.82	31.15	31.49	31.82	32.16	32.49
68	30.60	30.94	31.28	31.62	31.96	32.30	32.64	32.98
69	31.05	31.39	31.74	32.08	32.43	32.77	33.12	33.46
70	31.50	31.85	32.20	32.55	32.90	33.25	33.60	33.95
71	31.95	32.30	32.66	33.01	33.37	33.72	34.08	34.43
72	32.40	32.76	33.12	33.48	33.84	34.20	34.56	34.92
73	32.85	33.21	33.58	33.94	34.31	34.67	35.04	35.40
74	33.30	33.67	34.04	34.41	34.78	35.15	35.52	35.89
75	33.75	34.12	34.50	34.87	35.25	35.62	36.00	36.37
76	34.20	34.58	34.96	35.34	35.72	36.10	36.48	36.86
77	34.65	35.03	35.42	35.80	36.19	36.57	36.96	37.34
78	35.10	35.49	35.88	36.27	36.66	37.05	37.44	37.83
79	35.55	35.94	36.34	36.73	37.13	37.52	37.92	38.31
80	36.00	36.40	36.80	37.20	37.60	38.00	38.40	38.80
81	36.45	36.85	37.26	37.66	38.07	38.47	38.88	39.28
82	36.90	37.31	37.72	38.13	38.54	38.95	39.36	39.77
83	37.35	37.76	38.18	38.59	39.01	39.42	39.84	40.25
84	37.80	38.22	38.64	39.06	39.48	39.90	40.32	40.74
85	38.25	38.67	39.10	39.52	39.95	40.37	40.80	41.22

True per cent. of proof.	WINE-GALLONS.							
	45	45½	46	46½	47	47½	48	48½
86...	38.70	39.13	39.56	39.99	40.42	40.85	41.28	41.71
87...	39.15	39.58	40.02	40.45	40.89	41.32	41.76	42.19
88...	39.60	40.04	40.48	40.92	41.36	41.80	42.24	42.68
89...	40.05	40.49	40.94	41.38	41.83	42.27	42.72	43.16
90...	40.50	40.95	41.40	41.85	42.30	42.75	43.20	43.65
91...	40.95	41.40	41.86	42.31	42.77	43.22	43.68	44.13
92...	41.40	41.86	42.32	42.78	43.24	43.70	44.16	44.62
93...	41.85	42.31	42.78	43.24	43.71	44.17	44.64	45.10
94...	42.30	42.77	43.24	43.71	44.18	44.65	45.12	45.59
95...	42.75	43.22	43.70	44.17	44.65	45.12	45.60	46.07
96...	43.20	43.68	44.16	44.64	45.12	45.60	46.08	46.56
97...	43.65	44.13	44.62	45.10	45.59	46.07	46.56	47.04
98...	44.10	44.59	45.08	45.57	46.06	46.55	47.04	47.53
99...	44.55	45.04	45.54	46.03	46.53	47.02	47.52	48.01
100...	45.00	45.50	46.00	46.50	47.00	47.50	48.00	48.50
101...	45.45	45.95	46.46	46.96	47.47	47.97	48.48	48.98
102...	45.90	46.41	46.92	47.43	47.94	48.45	48.96	49.47
103...	46.35	46.86	47.38	47.89	48.41	48.92	49.44	49.95
104...	46.80	47.32	47.84	48.36	48.88	49.40	49.92	50.44
105...	47.25	47.77	48.30	48.82	49.35	49.87	50.40	50.92
106...	47.70	48.23	48.76	49.29	49.82	50.35	50.88	51.41
107...	48.15	48.68	49.22	49.75	50.29	50.82	51.36	51.89
108...	48.60	49.14	49.68	50.22	50.76	51.30	51.84	52.38
109...	49.05	49.59	50.14	50.68	51.23	51.77	52.32	52.86
110...	49.50	50.05	50.60	51.15	51.70	52.25	52.80	53.35
111...	49.95	50.50	51.06	51.61	52.17	52.72	53.28	53.83
112...	50.40	50.96	51.52	52.08	52.64	53.20	53.76	54.32
113...	50.85	51.41	51.98	52.54	53.11	53.67	54.24	54.80
114...	51.30	51.87	52.44	53.01	53.58	54.15	54.72	55.29
115...	51.75	52.32	52.90	53.47	54.05	54.62	55.20	55.77
116...	52.20	52.78	53.36	53.94	54.52	55.10	55.68	56.26
117...	52.65	53.23	53.82	54.40	54.99	55.57	56.16	56.74
118...	53.10	53.69	54.28	54.87	55.46	56.05	56.64	57.23
119...	53.55	54.14	54.74	55.33	55.93	56.52	57.12	57.71
120...	54.00	54.60	55.20	55.80	56.40	57.00	57.60	58.20
121...	54.45	55.05	55.66	56.26	56.87	57.47	58.08	58.68
122...	54.90	55.51	56.12	56.73	57.34	57.95	58.56	59.17
123...	55.35	55.96	56.58	57.19	57.81	58.42	59.04	59.65
124...	55.80	56.42	57.04	57.66	58.28	58.90	59.52	60.14
125...	56.25	56.87	57.50	58.12	58.75	59.37	60.00	60.62
126...	56.70	57.33	57.96	58.59	59.22	59.85	60.48	61.11
127...	57.15	57.78	58.42	59.05	59.69	60.32	60.96	61.59
128...	57.60	58.24	58.88	59.52	60.16	60.80	61.44	62.08
129...	58.05	58.69	59.34	59.98	60.63	61.27	61.92	62.56
130...	58.50	59.15	59.80	60.45	61.10	61.75	62.40	63.05
131...	58.95	59.60	60.26	60.91	61.57	62.22	62.88	63.53

True per cent. of proof.	WINE-GALLONS.							
	45	45½	46	46½	47	47½	48	48½
132...	59.40	60.06	60.72	61.38	62.04	62.70	63.36	64.02
133...	59.85	60.51	61.18	61.84	62.51	63.17	63.81	64.50
134...	60.30	60.97	61.64	62.31	62.98	63.65	64.32	64.99
135...	60.75	61.42	62.10	62.77	63.45	64.12	64.80	65.47
136...	61.20	61.88	62.56	63.24	63.92	64.60	65.28	65.96
137...	61.65	62.33	63.02	63.70	64.39	65.07	65.76	66.44
138...	62.10	62.79	63.48	64.17	64.86	65.55	66.24	66.93
139...	62.55	63.24	63.94	64.63	65.33	66.02	66.72	67.41
140...	63.00	63.70	64.40	65.10	65.80	66.50	67.20	67.90
141...	63.45	64.15	64.86	65.56	66.27	66.97	67.68	68.38
142...	63.90	64.61	65.32	66.03	66.74	67.45	68.16	68.87
143...	64.35	65.06	65.78	66.49	67.21	67.92	68.64	69.35
144...	64.80	65.52	66.24	66.96	67.68	68.40	69.12	69.84
145...	65.25	65.97	66.70	67.42	68.15	68.87	69.60	70.32
146...	65.70	66.43	67.16	67.89	68.62	69.35	70.08	70.81
147...	66.15	66.88	67.62	68.35	69.09	69.82	70.56	71.29
148...	66.60	67.34	68.08	68.82	69.56	70.30	71.04	71.78
149...	67.05	67.79	68.54	69.28	70.03	70.77	71.52	72.26
150...	67.50	68.25	69.00	69.75	70.50	71.25	72.00	72.75
151...	67.95	68.70	69.46	70.21	70.97	71.72	72.48	73.23
152...	68.40	69.16	69.92	70.68	71.44	72.20	72.96	73.72
153...	68.85	69.61	70.38	71.14	71.91	72.67	73.44	74.20
154 ..	69.30	70.07	70.84	71.61	72.38	73.15	73.92	74.69
155...	69.75	70.52	71.30	72.07	72.85	73.62	74.40	75.17
156...	70.20	70.98	71.76	72.54	73.32	74.10	74.88	75.66
157...	70.65	71.43	72.22	73.00	73.79	74.57	75.36	76.14
158...	71.10	71.89	72.68	73.47	74.26	75.05	75.84	76.63
159...	71.55	72.34	73.14	73.93	74.73	75.52	76.32	77.11
160...	72.00	72.80	73.60	74.40	75.20	76.00	76.80	77.60

True per cent. of proof.	WINE-GALLONS.							
	49	49½	50	50½	51	51½	52	52½
40	19.60	19.80	20.00	20.20	20.40	20.60	20.80	21.00
41	20.09	20.29	20.50	20.70	20.91	21.11	21.32	21.52
42	20.58	20.79	21.00	21.21	21.42	21.63	21.84	22.05
43	21.07	21.28	21.50	21.71	21.93	22.14	22.36	22.57
44	21.56	21.78	22.00	22.22	22.44	22.66	22.88	23.10
45	22.05	22.27	22.50	22.72	22.95	23.17	23.40	23.62
46	22.54	22.77	23.00	23.23	23.46	23.69	23.92	24.15
47	23.03	23.26	23.50	23.73	23.97	24.20	24.44	24.67
48	23.52	23.76	24.00	24.24	24.48	24.72	24.96	25.20
49	24.01	24.25	24.50	24.74	24.99	25.23	25.48	25.72
50	24.50	24.75	25.00	25.25	25.50	25.75	26.00	26.25
51	24.99	25.24	25.50	25.75	26.01	26.26	26.52	26.77
52	25.48	25.74	26.00	26.26	26.52	26.78	27.04	27.30
53	25.97	26.23	26.50	26.76	27.03	27.29	27.56	27.82
54	26.46	26.73	27.00	27.27	27.54	27.81	28.08	28.35
55	26.95	27.22	27.50	27.77	28.05	28.32	28.60	28.87
56	27.44	27.72	28.00	28.28	28.56	28.84	29.12	29.40
57	27.93	28.21	28.50	28.78	29.07	29.35	29.64	29.92
58	28.42	28.71	29.00	29.29	29.58	29.87	30.16	30.45
59	28.91	29.20	29.50	29.79	30.09	30.38	30.68	30.97
60	29.40	29.70	30.00	30.30	30.60	30.90	31.20	31.50
61	29.89	30.19	30.50	30.80	31.11	31.41	31.72	32.02
62	30.38	30.69	31.00	31.31	31.62	31.93	32.24	32.55
63	30.87	31.18	31.50	31.81	32.13	32.44	32.76	33.07
64	31.36	31.68	32.00	32.32	32.64	32.96	33.28	33.60
65	31.85	32.17	32.50	32.82	33.15	33.47	33.80	34.12
66	32.34	32.67	33.00	33.33	33.66	33.99	34.32	34.65
67	32.83	33.16	33.50	33.83	34.17	34.50	34.84	35.17
68	33.32	33.66	34.00	34.34	34.68	35.02	35.36	35.70
69	33.81	34.15	34.50	34.84	35.19	35.53	35.88	36.22
70	34.30	34.65	35.00	35.35	35.70	36.05	36.40	36.75
71	34.79	35.14	35.50	35.85	36.21	36.56	36.92	37.27
72	35.28	35.64	36.00	36.36	36.72	37.08	37.44	37.80
73	35.77	36.13	36.50	36.86	37.23	37.59	37.96	38.32
74	36.26	36.63	37.00	37.37	37.74	38.11	38.48	38.85
75	36.75	37.12	37.50	37.87	38.25	38.62	39.00	39.37
76	37.24	37.62	38.00	38.38	38.76	39.14	39.52	39.90
77	37 73	38.11	38.50	38.88	39.27	39.65	40.04	40.42
78	38.22	38.61	39.00	39.39	39.78	40.17	40.56	40.95
79	38.71	39.10	39.50	39.89	40.29	40.68	41.08	41.47
80	39.20	39.60	40.00	40.40	40.80	41.20	41.60	42.00
81	39.69	40.09	40.50	40.90	41.31	41.71	42.12	42.52
82	40.18	40.59	41.00	41.41	41.82	42.23	42.64	43.05
83	40.67	41.08	41.50	41.91	42.33	42.74	43.16	43.57
84	41.16	41.58	42.00	42.42	42.84	43.26	43.68	44.10
85	41.65	42.07	42.50	42.92	43.35	43.77	44.20	44.62

True per cent. of proof.	WINE-GALLONS.							
	49	49½	50	50½	51	51½	52	52½
86...	42.14	42.57	43.00	43.43	43.86	44.29	44.72	45.15
87...	42.63	43.06	43.50	43.93	44.37	44.80	45.24	45.67
88...	43.12	43.56	44.00	44.44	44.88	45.32	45.76	46.20
89...	43.61	44.05	44.50	44.94	45.39	45.83	46.28	46.72
90...	44.10	44.55	45.00	45.45	45.90	46.35	46.80	47.25
91...	44.59	45.04	45.50	45.95	46.41	46.86	47.32	47.77
92...	45.08	45.54	46.00	46.46	46.92	47.38	47.84	48.30
93...	45.57	46.03	46.50	46.96	47.43	47.89	48.36	48.82
94...	46.06	46.53	47.00	47.47	47.94	48.41	48.88	49.35
95...	46.55	47.02	47.50	47.97	48.45	48.92	49.40	49.87
96...	47.04	47.52	48.00	48.48	48.96	49.44	49.92	50.40
97...	47.53	48.01	48.50	48.98	49.47	49.95	50.44	50.92
98...	48.02	48.51	49.00	49.49	49.98	50.47	50.93	51.45
99...	48.51	49.00	49.50	49.99	50.49	50.98	51.48	51.97
100...	49.00	49.50	50.00	50.50	51.00	51.50	52.00	52.50
101...	49.49	49.99	50.50	51.00	51.51	52.01	52.52	53.02
102...	49.98	50.49	51.00	51.51	52.02	52.53	53.04	53.55
103...	50.47	50.98	51.50	52.01	52.53	53.04	53.56	54.07
104...	50.96	51.48	52.00	52.52	53.04	53.56	54.08	54.60
105...	51.45	51.97	52.50	53.02	53.55	54.07	54.60	55.12
106...	51.94	52.47	53.00	53.53	54.06	54.59	55.12	55.65
107...	52.43	52.96	53.50	54.03	54.57	55.10	55.64	56.17
108...	52.92	53.46	54.00	54.54	55.08	55.62	56.16	56.70
109...	53.41	53.95	54.50	55.04	55.59	56.13	56.68	57.22
110...	53.90	54.45	55.00	55.55	56.10	56.65	57.20	57.75
111...	54.39	54.94	55.50	56.05	56.61	57.16	57.72	58.27
112...	54.88	55.44	56.00	56.56	57.12	57.68	58.24	58.80
113...	55.37	55.93	56.50	57.06	57.63	58.19	58.76	59.32
114...	55.86	56.43	57.00	57.57	58.14	58.71	59.28	59.85
115...	56.35	56.92	57.50	58.07	58.65	59.22	59.80	60.37
116...	56.84	57.42	58.00	58.58	59.16	59.74	60.32	60.90
117...	57.33	57.91	58.50	59.08	59.67	60.25	60.84	61.42
118...	57.82	58.41	59.00	59.59	60.18	60.77	61.36	61.95
119...	58.31	58.90	59.50	60.09	60.69	61.28	61.88	62.47
120...	58.80	59.40	60.00	60.60	61.20	61.80	62.40	63.00
121...	59.29	59.89	60.50	61.10	61.71	62.31	62.92	63.52
122...	59.78	60.39	61.00	61.61	62.22	62.83	63.44	64.05
123...	60.27	60.88	61.50	62.11	62.73	63.34	63.96	64.57
124...	60.76	61.38	62.00	62.62	63.24	63.86	64.48	65.10
125...	61.25	61.87	62.50	63.12	63.75	64.37	65.00	65.62
126...	61.74	62.37	63.00	63.63	64.26	64.89	65.52	66.15
127...	62.23	62.86	63.50	64.13	64.77	65.40	66.04	66.67
128...	62.72	63.36	64.00	64.64	65.28	65.92	66.56	67.20
129...	63.21	63.85	64.50	65.14	65.79	66.43	67.08	67.72
130...	63.70	64.35	65.00	65.65	66.30	66.95	67.60	68.25
131...	64.19	64.84	65.50	66.15	66.81	67.46	68.12	68.77

True per cent. of proof.	WINE-GALLONS.							
	49	49½	50	50½	51	51½	52	52½
132...	64.68	65.34	66.00	66.66	67.32	67.98	68.64	69.30
133...	65.17	65.83	66.50	67.16	67.83	68.49	69.16	69.82
134...	65.66	66.33	67.00	67.67	68.34	69.01	69.68	70.35
135...	66.15	66.82	67.50	68.17	68.85	69.52	70.20	70.87
136...	66.64	67.32	68.00	68.68	69.36	70.04	70.72	71.40
137...	67.13	67.81	68.50	69.18	69.87	70.55	71.24	71.92
138...	67.62	68.31	69.00	69.69	70.38	71.07	71.76	72.45
139...	68.11	68.80	69.50	70.19	70.89	71.58	72.28	72.97
140...	68.60	69.30	70.00	70.70	71.40	72.10	72.80	73.50
141...	69.09	69.79	70.50	71.20	71.91	72.61	73.32	74.02
142...	69.58	70.29	71.00	71.71	72.42	73.13	73.84	74.55
143...	70.07	70.78	71.50	72.21	72.93	73.64	74.36	75.07
144...	70.56	71.28	72.00	72.72	73.44	74.16	74.88	75.60
145...	71.05	71.77	72.50	73.22	73.95	74.67	75.40	76.12
146...	71.54	72.27	73.00	73.73	74.46	75.19	75.92	76.65
147...	72.03	72.76	73.50	74.23	74.97	75.70	76.44	77.17
148...	72.52	73.26	74.00	74.74	75.48	76.22	76.96	77.70
149...	73.01	73.75	74.50	75.24	75.99	76.73	77.48	78.22
150...	73.50	74.25	75.00	75.75	76.50	77.25	78.00	78.75
151...	73.99	74.74	75.50	76.25	77.01	77.76	78.52	79.27
152...	74.48	75.24	76.00	76.76	77.52	78.28	79.04	79.80
153...	74.97	75.73	76.50	77.26	78.03	78.79	79.56	80.32
154...	75.46	76.23	77.00	77.77	78.54	79.31	80.08	80.85
155...	75.95	76.72	77.50	78.27	79.05	79.82	80.60	81.37
156...	76.44	77.22	78.00	78.78	79.56	80.34	81.12	81.90
157...	76.93	77.71	78.50	79.28	80.07	80.85	81.64	82.42
158...	77.42	78.21	79.00	79.79	80.58	81.37	82.16	82.95
159...	77.91	78.70	79.50	80.29	81.09	81.88	82.68	83.47
160...	78.40	79.20	80.00	80.80	81.60	82.40	83.20	84.00

True per cent. of proof.	WINE-GALLONS.							
	53	53½	54	54½	55	55½	56	56½
40	21.20	21.40	21.60	21.80	22.00	22.20	22.40	22.60
41	21.73	21.93	22.14	22.34	22.55	22.75	22.95	23.16
42	22.26	22.47	22.68	22.89	23.10	23.31	23.52	23.73
43	22.79	23.00	23.22	23.43	23.65	23.86	24.08	24.29
44	23.32	23.54	23.76	23.98	24.20	24.42	24.64	24.86
45	23.85	24.07	24.30	24.52	24.75	24.97	25.20	25.42
46	24.38	24.61	24.84	25.07	25.30	25.53	25.76	25.99
47	24.91	25.14	25.38	25.61	25.85	26.08	26.32	26.55
48	25.44	25.68	25.92	26.16	26.40	26.64	26.88	27.12
49	25.97	26.21	26.46	26.70	26.95	27.19	27.44	27.68
50	26.50	26.75	27.00	27.25	27.50	27.75	28.00	28.25
51	27.03	27.28	27.54	27.79	28.05	28.30	28.56	28.81
52	27.56	27.82	28.08	28.34	28.60	28.86	29.12	29.38
53	28.09	28.35	28.62	28.88	29.15	29.41	29.68	29.94
54	28.62	28.89	29.16	29.43	29.70	29.97	30.24	30.51
55	29.15	29.42	29.70	29.97	30.25	30.52	30.80	31.07
56	29.68	29.96	30.24	30.52	30.80	31.08	31.36	31.64
57	30.21	30.49	30.78	31.06	31.35	31.63	31.92	32.20
58	30.74	31.03	31.32	31.61	31.90	32.19	32.48	32.77
59	31.27	31.56	31.86	32.15	32.45	32.74	33.04	33.33
60	31.80	32.10	32.40	32.70	33.00	33.30	33.60	33.90
61	32.33	32.63	32.94	33.24	33.55	33.85	34.16	34.46
62	32.86	33.17	33.48	33.79	34.10	34.41	34.72	35.03
63	33.39	33.70	34.02	34.33	34.65	34.96	35.28	35.59
64	33.92	34.24	34.56	34.88	35.20	35.52	35.84	36.16
65	34.45	34.77	35.10	35.42	35.75	36.07	36.40	36.72
66	34.98	35.31	35.64	35.97	36.30	36.63	36.96	37.29
67	35.51	35.84	36.18	36.51	36.85	37.18	37.52	37.85
68	36.04	36.38	36.72	37.06	37.40	37.74	38.08	38.42
69	36.57	36.91	37.26	37.60	37.95	38.29	38.64	38.98
70	37.10	37.45	37.80	38.15	38.50	38.85	39.20	39.55
71	37.63	37.98	38.34	38.69	39.05	39.40	39.76	40.11
72	38.16	38.52	38.88	39.24	39.60	39.96	40.32	40.68
73	38.69	39.05	39.42	39.78	40.15	40.51	40.88	41.24
74	39.22	39.59	39.96	40.33	40.70	41.07	41.44	41.81
75	39.75	40.12	40.50	40.87	41.25	41.62	42.00	42.37
76	40.28	40.66	41.04	41.42	41.80	42.18	42.56	42.94
77	40.81	41.19	41.58	41.96	42.35	42.73	43.12	43.50
78	41.34	41.73	42.12	42.51	42.90	43.29	43.68	44.07
79	41.87	42.26	42.66	43.05	43.45	43.84	44.24	44.63
80	42.40	42.80	43.20	43.60	44.00	44.40	44.80	45.20
81	42.93	43.33	43.74	44.14	44.55	44.95	45.36	45.76
82	43.46	43.87	44.28	44.69	45.10	45.51	45.92	46.33
83	43.99	44.40	44.82	45.23	45.65	46.06	46.48	46.89
84	44.52	44.94	45.36	45.78	46.20	46.62	47.04	47.46
85	45.05	45.47	45.90	46.32	46.75	47.17	47.60	48.02

True per cent. of proof.	WINE-GALLONS.							
	53	53½	54	54½	55	55½	56	56½
86...	45.58	46.01	46.44	46.87	47.30	47.73	48.16	48.59
87...	46.11	46.54	46.98	47.41	47.85	48.28	48.72	49.15
88...	46.64	47.08	47.52	47.96	48.40	48.84	49.28	49.72
89...	47.17	47.61	48.06	48.50	48.95	49.39	49.84	50.28
90...	47.70	48.15	48.60	49.05	49.50	49.95	50.40	50.85
91...	48.23	48.68	49.14	49.59	50.05	50.50	50.96	51.41
92...	48.76	49.22	49.68	50.14	50.60	51.06	51.52	51.98
93...	49.29	49.75	50.22	50.68	51.15	51.61	52.08	52.54
94...	49.82	50.29	50.76	51.23	51.70	52.17	52.64	53.11
95...	50.35	50.82	51.30	51.77	52.25	52.72	53.20	53.67
96...	50.88	51.36	51.84	52.32	52.80	53.28	53.76	54.24
97...	51.41	51.89	52.38	52.86	53.35	53.83	54.32	54.80
98...	51.94	52.43	52.92	53.41	53.90	54.39	54.88	55.37
99...	52.47	52.96	53.46	53.95	54.45	54.94	55.44	55.93
100...	53.00	53.50	54.00	54.50	55.00	55.50	56.00	56.50
101...	53.53	54.03	54.54	55.04	55.55	56.05	56.56	57.06
102...	54.06	54.57	55.08	55.59	56.10	56.61	57.12	57.63
103...	54.59	55.10	55.62	56.13	56.65	57.16	57.68	58.19
104...	55.12	55.64	56.16	56.68	57.20	57.72	58.24	58.76
105...	55.65	56.17	56.70	57.22	57.75	58.27	58.80	59.32
106...	56.18	56.71	57.24	57.77	58.30	58.83	59.36	59.89
107...	56.71	57.24	57.78	58.31	58.85	59.38	59.92	60.45
108...	57.24	57.78	58.32	58.86	59.40	59.94	60.48	61.02
109...	57.77	58.31	58.86	59.40	59.95	60.49	61.04	61.58
110...	58.30	58.85	59.40	59.95	60.50	61.05	61.60	62.15
111...	58.83	59.38	59.94	60.49	61.05	61.60	62.16	62.71
112...	59.36	59.92	60.48	61.04	61.60	62.16	62.72	63.28
113...	59.89	60.45	61.02	61.58	62.15	62.71	63.28	63.84
114...	60.42	60.99	61.56	62.13	62.70	63.27	63.84	64.41
115...	60.95	61.52	62.10	62.67	63.25	63.82	64.40	64.97
116...	61.48	62.06	62.64	63.22	63.80	64.38	64.96	65.54
117...	62.01	62.59	63.18	63.76	64.35	64.93	65.52	66.10
118...	62.54	63.13	63.72	64.31	64.90	65.49	66.08	66.67
119...	63.07	63.66	64.26	64.85	65.45	66.04	66.64	67.23
120...	63.60	64.20	64.80	65.40	66.00	66.60	67.20	67.80
121...	64.13	64.73	65.34	65.94	66.55	67.15	67.76	68.36
122...	64.66	65.27	65.88	66.49	67.10	67.71	68.32	68.93
123...	65.19	65.80	66.42	67.03	67.65	68.26	68.88	69.49
124...	65.72	66.34	66.96	67.58	68.20	68.82	69.44	70.06
125...	66.25	66.87	67.50	68.12	68.75	69.37	70.00	70.62
126...	66.78	67.41	68.04	68.67	69.36	69.93	70.56	71.19
127...	67.31	67.94	68.58	69.21	69.85	70.48	71.12	71.75
128...	67.84	68.48	69.12	69.76	70.40	71.04	71.68	72.32
129...	68.37	69.01	69.66	70.30	70.95	71.59	72.24	72.88
130...	68.90	69.55	70.20	70.85	71.50	72.15	72.80	73.45
131...	69.43	70.08	70.74	71.39	72.05	72.70	73.36	74.01

True per cent. of proof.	WINE-GALLONS.							
	53	53½	54	54½	55	55½	56	56½
132...	69.96	70.62	71.28	71.94	72.60	73.26	73.92	74.58
133...	70.49	71.15	71.82	72.48	73.15	73.81	74.48	75.14
134...	71.02	71.69	72.36	73.03	73.70	74.37	75.04	75.71
135...	71.55	72.22	72.90	73.57	74.25	74.92	75.60	76.27
136...	72.08	72.76	73.44	74.12	74.80	75.48	76.16	76.84
137...	72.61	73.29	73.98	74.66	75.35	76.03	76.72	77.40
138...	73.14	73.83	74.52	75.21	75.90	76.59	77.28	77.97
139...	73.67	74.36	75.06	75.75	76.45	77.14	77.84	78.53
140...	74.20	74.90	75.60	76.30	77.00	77.70	78.40	79.10
141...	74.73	75.43	76.14	76.84	77.55	78.25	78.96	79.66
142...	75.26	75.97	76.68	77.39	78.10	78.81	79.52	80.23
143...	75.79	76.50	77.22	77.93	78.65	79.36	80.08	80.79
144...	76.32	77.04	77.76	78.48	79.20	79.92	80.64	81.36
145...	76.85	77.57	78.30	79.02	79.75	80.47	81.20	81.92
146...	77.38	78.11	78.84	79.57	80.30	81.03	81.76	82.49
147...	77.91	78.64	79.38	80.11	80.85	81.58	82.32	83.05
148...	78.44	79.18	79.92	80.66	81.40	82.14	82.88	83.62
149...	78.97	79.71	80.46	81.20	81.95	82.69	83.44	84.18
150...	79.50	80.25	81.00	81.75	82.50	83.25	84.00	84.75
151...	80.03	80.78	81.54	82.29	83.05	83.80	84.56	85.31
152...	80.56	81.32	82.08	82.84	83.60	84.36	85.12	85.88
153...	81.09	81.85	82.62	83.38	84.15	84.91	85.68	86.44
154...	81.62	82.39	83.16	83.93	84.70	85.47	86.24	87.01
155...	82.15	82.92	83.70	84.47	85.25	86.02	86.80	87.57
156...	82.68	83.46	84.24	85.02	85.80	86.58	87.36	88.14
157...	83.21	83.99	84.78	85.56	86.35	87.13	87.92	88.70
158...	83.74	84.53	85.32	86.11	86.90	87.69	88.48	89.27
159...	84.27	85.06	85.86	86.65	87.45	88.24	89.04	89.83
160...	84.80	85.60	86.40	87.20	88.00	88.80	89.60	90.40

True per cent. of proof.	WINE-GALLONS.							
	57	57½	58	58½	59	59½	60	60½
40	22.80	23.00	23.20	23.40	23.60	23.80	24.00	24.20
41	23.37	23.57	23.78	23.98	24.19	24.39	24.60	24.80
42	23.94	24.15	24.36	24.57	24.78	24.99	25.20	25.41
43	24.51	24.72	24.94	25.15	25.37	25.58	25.80	26.01
44	25.08	25.30	25.52	25.74	25.96	26.18	26.40	26.62
45	25.65	25.87	26.10	26.32	26.55	26.77	27.00	27.22
46	26.22	26.45	26.68	26.91	27.14	27.37	27.60	27.83
47	26.79	27.02	27.26	27.49	27.73	27.96	28.20	28.43
48	27.36	27.60	27.84	28.08	28.32	28.56	28.80	29.04
49	27.93	28.17	28.42	28.66	28.91	29.15	29.40	29.64
50	28.50	28.75	29.00	29.25	29.50	29.75	30.00	30.25
51	29.07	29.32	29.58	29.83	30.09	30.34	30.60	30.85
52	29.64	29.90	30.16	30.42	30.68	30.94	31.20	31.46
53	30.21	30.47	30.74	31.00	31.27	31.53	31.80	32.06
54	30.78	31.05	31.32	31.59	31.86	32.13	32.40	32.67
55	31.35	31.62	31.90	32.17	32.45	32.72	33.00	33.27
56	31.92	32.20	32.48	32.76	33.04	33.32	33.60	33.88
57	32.49	32.77	33.06	33.34	33.63	33.91	34.20	34.48
58	33.06	33.35	33.64	33.93	34.22	34.51	34.80	35.09
59	33.63	33.92	34.22	34.51	34.81	35.10	35.40	35.69
60	34.20	34.50	34.80	35.10	35.40	35.70	36.00	36.30
61	34.77	35.07	35.38	35.68	35.99	36.29	36.60	36.90
62	35.34	35.65	35.96	36.27	36.58	36.89	37.20	37.51
63	35.91	36.22	36.54	36.85	37.17	37.48	37.80	38.11
64	36.48	36.80	37.12	37.44	37.76	38.08	38.40	38.72
65	37.05	37.37	37.70	38.02	38.35	38.67	39.00	39.32
66	37.62	37.95	38.28	38.61	38.94	39.27	39.60	39.93
67	38.19	38.52	38.86	39.19	39.53	39.86	40.20	40.53
68	38.76	39.10	39.44	39.78	40.12	40.46	40.80	41.14
69	39.33	39.67	40.02	40.36	40.71	41.05	41.40	41.74
70	39.90	40.25	40.60	40.95	41.30	41.65	42.00	42.35
71	40.47	40.82	41.18	41.53	41.89	42.24	42.60	42.95
72	41.04	41.40	41.76	42.12	42.48	42.84	43.20	43.56
73	41.61	41.97	42.34	42.70	43.07	43.43	43.80	44.16
74	42.18	42.55	42.92	43.29	43.66	44.03	44.40	44.77
75	42.75	43.12	43.50	43.87	44.25	44.62	45.00	45.37
76	43.32	43.70	44.08	44.46	44.84	45.22	45.60	45.98
77	43.89	44.27	44.66	45.04	45.43	45.81	46.20	46.58
78	44.46	44.85	45.24	45.63	46.02	46.41	46.80	47.19
79	45.03	45.42	45.82	46.21	46.61	47.00	47.40	47.79
80	45.60	46.00	46.40	46.80	47.20	47.60	48.00	48.40
81	46.17	46.57	46.98	47.38	47.79	48.19	48.60	49.00
82	46.74	47.15	47.56	47.97	48.38	48.79	49.20	49.61
83	47.31	47.72	48.14	48.55	48.97	49.38	49.80	50.21
84	47.88	48.30	48.72	49.14	49.56	49.98	50.40	50.82
85	48.45	48.87	49.30	49.72	50.15	50.57	51.00	51.42

True per cent. of proof.	WINE-GALLONS.							
	57	57½	58	58½	59	59½	60	60½
86...	49.02	49.45	49.88	50.31	50.74	51.17	51.60	52.03
87...	49.59	50.02	50.46	50.89	51.33	51.76	52.20	52.63
88...	50.16	50.60	51.04	51.48	51.92	52.36	52.80	53.24
89...	50.73	51.17	51.62	52.06	52.51	52.95	53.40	53.84
90...	51.30	51.75	52.20	52.65	53.10	53.55	54.00	54.45
91...	51.87	52.32	52.78	53.23	53.69	54.14	54.60	55.05
92...	52.44	52.90	53.36	53.82	54.28	54.74	55.20	55.66
93...	53.01	53.47	53.94	54.40	54.87	55.33	55.80	56.25
94...	53.58	54.05	54.52	54.99	55.46	55.93	56.40	56.87
95...	54.15	54.62	55.10	55.57	56.05	56.52	57.00	57.47
96...	54.72	55.20	55.68	56.16	56.64	57.12	57.60	58.08
97...	55.29	55.77	56.26	56.74	57.23	57.71	58.20	58.68
98...	55.86	56.35	56.84	57.33	57.82	58.31	58.80	59.29
96...	56.43	56.92	57.42	57.91	58.41	58.90	59.40	59.89
100...	57.00	57.50	58.00	58.50	59.00	59.50	60.00	60.50
101...	57.57	58.07	58.58	59.08	59.59	60.09	60.60	61.10
102...	58.14	58.65	59.16	59.67	60.18	60.69	61.20	61.71
103...	58.71	59.22	59.74	60.25	60.77	61.28	61.80	62.31
104...	59.28	59.80	60.32	60.84	61.36	61.88	62.40	62.92
105...	59.85	60.37	60.90	61.42	61.95	62.47	63.00	63.52
106...	60.42	60.95	61.48	62.01	62.54	63.07	63.60	64.13
107...	60.99	61.52	62.06	62.59	63.13	63.66	64.20	64.73
108...	61.56	62.10	62.64	63.18	63.72	64.26	64.80	65.34
109...	62.13	62.67	63.22	63.76	64.31	64.85	65.40	65.94
110...	62.70	63.25	63.80	64.35	64.90	65.45	66.00	66.55
111...	63.27	63.82	64.38	64.93	65.49	66.04	66.60	67.15
112...	63.84	64.40	64.96	65.52	66.08	66.64	67.20	67.76
113...	64.41	64.97	65.54	66.10	66.67	67.23	67.80	68.36
114...	64.98	65.55	66.12	66.69	67.26	67.83	68.40	68.97
115...	65.55	66.12	66.70	67.27	67.85	68.42	69.00	69.57
116...	66.12	66.70	67.28	67.86	68.44	69.02	69.60	70.18
117...	66.69	67.27	67.86	68.44	69.03	69.61	70.20	70.78
118...	67.26	67.85	68.44	69.03	69.62	70.21	70.80	71.39
119...	67.83	68.42	69.02	69.61	70.21	70.80	71.40	71.99
120...	68.40	69.00	69.60	70.20	70.80	71.40	72.00	72.60
121...	68.97	69.57	70.18	70.78	71.39	71.99	72.60	73.20
122...	69.54	70.15	70.76	71.37	71.98	72.59	73.20	73.81
123...	70.11	70.72	71.34	71.95	72.57	73.18	73.80	74.41
124...	70.68	71.30	71.92	72.54	73.16	73.78	74.40	75.02
125...	71.25	71.87	72.50	73.12	73.75	74.37	75.00	75.62
126...	71.82	72.45	73.08	73.71	74.34	74.97	75.60	76.23
127...	72.39	73.02	73.66	74.29	74.93	75.56	76.20	76.83
128...	72.96	73.60	74.24	74.88	75.52	76.16	76.80	77.44
129...	73.53	74.17	74.82	75.46	76.11	76.75	77.40	78.04
130...	74.10	74.75	75.40	76.05	76.70	77.35	78.00	78.65
131...	74.67	75.32	75.98	76.63	77.29	77.94	78.60	79.25

True per cent. of proof.	WINE-GALLONS.							
	57	57½	58	58½	59	59½	60	60½
132...	75.24	75.90	76.56	77.22	77.88	78.54	79.20	79.86
133...	75.81	76.47	77.14	77.80	78.47	79.13	79.80	80.46
134...	76.38	77.05	77.72	78.39	79.06	79.73	80.40	81.07
135...	76.95	77.62	78.30	78.97	79.65	80.32	81.00	81.67
136...	77.52	78.20	78.88	79.56	80.24	80.92	81.60	82.28
137...	78.09	78.77	79.46	80.14	80.83	81.51	82.20	82.88
138...	78.66	79.35	80.04	80.73	81.42	82.11	82.80	83.49
139...	79.23	79.92	80.62	81.31	82.01	82.70	83.40	84.09
140...	79.80	80.50	81.20	81.90	82.60	83.30	84.00	84.76
141...	80.37	81.07	81.78	82.48	83.19	83.89	84.60	85.30
142...	80.94	81.65	82.36	83.07	83.78	84.49	85.20	85.91
143...	81.51	82.22	82.94	83.65	84.37	85.08	85.80	86.51
144...	82.08	82.80	83.52	84.24	84.96	85.68	86.40	87.12
145...	82.65	83.37	84.10	84.82	85.55	86.27	87.00	87.72
146...	83.22	83.95	84.68	85.41	86.14	86.87	87.60	88.33
147...	83.79	84.52	85.26	85.99	86.73	87.46	88.20	88.93
148...	84.36	85.10	85.84	86.58	87.32	88.06	88.80	89.54
149...	84.93	85.67	86.42	87.16	87.91	88.65	89.40	90.14
150...	85.50	86.25	87.00	87.75	88.50	89.25	90.00	90.75
151...	86.07	86.82	87.58	88.33	89.09	89.84	90.60	91.35
152...	86.64	87.40	88.16	88.92	89.68	90.44	91.20	91.96
153...	87.21	87.97	88.74	89.50	90.27	91.03	91.80	92.56
154...	87.78	88.55	89.32	90.09	90.86	91.63	92.40	93.17
155...	88.35	89.12	89.90	90.67	91.45	92.22	93.00	93.77
156...	88.92	89.70	90.48	91.26	92.04	92.82	93.60	94.38
157...	89.49	90.27	91.06	91.84	92.63	93.41	94.20	94.98
158...	90.06	90.85	91.64	92.43	93.22	94.01	94.80	95.59
159...	90.63	91.42	92.22	93.01	93.81	94.60	95.40	96.19
160...	91.20	92.00	92.80	93.60	94.40	95.20	96.00	96.80

True per cent. of proof.	WINE-GALLONS.							
	61	61½	62	62½	63	63½	64	64½
40	24.40	24.60	24.80	25.00	25.20	25.40	25.60	25.80
41	25.01	25.21	25.42	25.62	25.83	26.03	26.24	26.44
42	25.62	25.83	26.04	26.25	26.46	26.67	26.88	27.09
43	26.23	26.44	26.66	26.87	27.09	27.30	27.52	27.73
44	26.84	27.06	27.28	27.50	27.72	27.94	28.16	28.38
45	27.45	27.67	27.90	28.12	28.35	28.57	28.80	29.02
46	28.06	28.29	28.52	28.75	28.98	29.21	29.44	29.67
47	28.67	28.90	29.14	29.37	29.61	29.84	30.08	30.31
48	29.28	29.52	29.76	30.00	30.24	30.48	30.72	30.96
49	29.89	30.13	30.38	30.62	30.87	31.11	31.36	31.60
50	30.50	30.75	31.00	31.25	31.50	31.75	32.00	32.25
51	31.11	31.36	31.62	31.87	32.13	32.38	32.64	32.89
52	31.72	31.98	32.24	32.50	32.76	33.02	33.28	33.54
53	32.33	32.59	32.86	33.12	33.39	33.65	33.92	34.18
54	32.94	33.21	33.48	33.75	34.02	34.29	34.56	34.83
55	33.55	33.82	34.10	34.37	34.65	34.92	35.20	35.47
56	34.16	34.44	34.72	35.00	35.28	35.56	35.84	36.12
57	34.77	35.05	35.34	35.62	35.91	36.19	36.48	36.76
58	35.38	35.67	35.96	36.25	36.54	36.83	37.12	37.41
59	35.99	36.28	36.58	36.87	37.17	37.46	37.76	38.05
60	36.60	36.90	37.20	37.50	37.80	38.10	38.40	38.70
61	37.21	37.51	37.82	38.12	38.43	38.73	39.04	39.34
62	37.82	38.13	38.44	38.75	39.06	39.37	39.68	39.99
63	38.43	38.74	39.06	39.37	39.69	40.00	40.32	40.63
64	39.04	39.36	39.68	40.00	40.32	40.64	40.96	41.28
65	39.65	39.97	40.30	40.62	40.95	41.27	41.60	41.92
66	40.26	40.59	40.92	41.25	41.58	41.91	42.24	42.57
67	40.87	41.20	41.54	41.87	42.21	42.54	42.88	43.21
68	41.48	41.82	42.16	42.50	42.84	43.18	43.52	43.86
69	42.09	42.43	42.78	43.12	43.47	43.81	44.16	44.50
70	42.70	43.05	43.40	43.75	44.10	44.45	44.80	45.15
71	43.31	43.66	44.02	44.37	44.73	45.08	45.44	45.79
72	43.92	44.28	44.64	45.00	45.36	45.72	46.08	46.44
73	44.53	44.89	45.26	45.62	45.99	46.35	46.72	47.08
74	45.14	45.51	45.88	46.25	46.62	46.99	47.36	47.73
75	45.75	46.12	46.50	46.87	47.25	47.62	48.00	48.37
76	46.36	46.74	47.12	47.50	47.88	48.26	48.64	49.02
77	46.97	47.35	47.74	48.12	48.51	48.89	49.28	49.66
78	47.58	47.97	48.36	48.75	49.14	49.53	49.92	50.31
79	48.19	48.58	48.98	49.37	49.77	50.16	50.56	50.95
80	48.80	49.20	49.60	50.00	50.40	50.80	51.20	51.60
81	49.41	49.81	50.22	50.62	51.03	51.43	51.84	52.24
82	50.02	50.43	50.84	51.25	51.66	52.07	52.48	52.89
83	50.63	51.04	51.46	51.87	52.29	52.70	53.12	53.53
84	51.24	51.66	52.08	52.50	52.92	53.34	53.76	54.18
85	51.85	52.27	52.70	53.12	53.55	53.97	54.40	54.82

True per cent. of proof.	WINE-GALLONS.							
	61	61½	62	62½	63	63½	64	64½
86...	52.46	52.89	53.32	53.75	54.18	54.61	55.04	55.47
87...	53.07	53.50	53.94	54.37	54.81	55.24	55.68	56.11
88...	53.68	54.12	54.56	55.00	55.44	55.88	56.32	56.76
89...	54.29	54.73	55.18	55.62	56.07	56.51	56.96	57.40
90...	54.90	55.35	55.80	56.25	56.70	57.15	57.60	58.05
91...	55.51	55.96	56.42	56.87	57.33	57.78	58.24	58.69
92...	56.12	56.58	57.04	57.50	57.96	58.42	58.88	59.34
93...	56.73	57.19	57.66	58.12	58.59	59.05	59.52	59.98
94...	57.34	57.81	58.28	58.75	59.22	59.69	60.16	60.63
95...	57.95	58.42	58.90	59.37	59.85	60.32	60.80	61.27
96...	58.56	59.04	59.52	60.00	60.48	60.96	61.44	61.92
97...	59.17	59.65	60.14	60.62	61.11	61.59	62.08	62.56
98...	59.78	60.27	60.76	61.25	61.74	62.23	62.72	63.21
99...	60.39	60.88	61.38	61.87	62.37	62.86	63.36	63.85
100...	61.00	61.50	62.00	62.50	63.00	63.50	64.00	64.50
101...	61.61	62.11	62.62	63.12	63.63	64.13	64.64	65.14
102...	62.22	62.73	63.24	63.75	64.26	64.77	65.28	65.79
103...	62.83	63.34	63.86	64.37	64.89	65.40	65.92	66.43
104...	63.44	63.96	64.48	65.00	65.52	66.04	66.56	67.08
105...	64.05	64.57	65.10	65.62	66.15	66.67	67.20	67.72
106...	64.66	65.19	65.72	66.25	66.78	67.31	67.84	68.37
107...	65.27	65.80	66.34	66.87	67.41	67.94	68.48	69.01
108...	65.88	66.42	66.96	67.50	68.04	68.58	69.12	69.66
109...	66.49	67.03	67.58	68.12	68.67	69.21	69.76	70.30
110...	67.10	67.65	68.20	68.75	69.30	69.85	70.40	70.95
111...	67.71	68.26	68.82	69.37	69.93	70.48	71.04	71.59
112...	68.32	68.88	69.44	70.00	70.56	71.12	71.68	72.24
113...	68.93	69.49	70.06	70.62	71.19	71.75	72.32	72.88
114...	69.54	70.11	70.68	71.25	71.82	72.39	72.96	73.53
115...	70.15	70.72	71.30	71.87	72.45	73.02	73.60	74.17
116...	70.76	71.34	71.92	72.50	73.08	73.66	74.24	74.82
117...	71.37	71.95	72.54	73.12	73.71	74.29	74.88	75.46
118...	71.98	72.57	73.16	73.75	74.34	74.93	75.52	76.11
119...	72.59	73.18	73.78	74.37	74.97	75.56	76.16	76.75
120...	73.20	73.80	74.40	75.00	75.60	76.20	76.80	77.40
121...	73.81	74.41	75.02	75.62	76.23	76.83	77.44	78.04
122...	74.42	75.03	75.64	76.25	76.86	77.47	78.08	78.69
123...	75.03	75.64	76.26	76.87	77.49	78.10	78.72	79.33
124...	75.64	76.26	76.88	77.50	78.12	78.74	79.36	79.98
125...	76.25	76.87	77.50	78.12	78.75	79.37	80.00	80.62
126...	76.86	77.49	78.12	78.75	79.38	80.01	80.64	81.27
127...	77.47	78.10	78.74	79.37	80.01	80.64	81.28	81.91
128...	78.08	78.72	79.36	80.00	80.64	81.28	81.92	82.56
129...	78.69	79.33	79.98	80.62	81.27	81.91	82.56	83.20
130...	79.30	79.95	80.60	81.25	81.90	82.55	83.20	83.85
131...	79.91	80.56	81.22	81.87	82.53	83.18	83.84	84.49

True per cent. of proof.	WINE-GALLONS.							
	61	61½	62	62½	63	63½	64	64½
132...	80.52	81.18	81.84	82.50	83.16	83.82	84.48	85.14
133...	81.13	81.79	82.46	83.12	83.79	84.45	85.12	85.78
134...	81.74	82.41	83.08	83.75	84.42	85.09	85.76	86.43
135...	82.35	83.02	83.70	84.37	85.05	85.72	86.40	87.07
136...	82.96	83.64	84.32	85.00	85.68	86.36	87.04	87.72
137...	83.57	84.25	84.94	85.62	86.31	86.99	87.68	88.36
138...	84.18	84.87	85.56	86.25	86.94	87.63	88.32	89.01
139...	84.79	85.48	86.18	86.87	87.57	88.26	88.96	89.65
140...	85.40	86.10	86.80	87.50	88.20	88.90	89.60	90.30
141...	86.01	86.71	87.42	88.12	88.83	89.53	90.24	90.94
142...	86.62	87.33	88.04	88.75	89.46	90.17	90.88	91.59
143 ..	87.23	87.94	88.66	89.37	90.09	90.80	91.52	92.23
144...	87.84	88.56	89.28	90.00	90.72	91.44	92.16	92.88
145...	88.45	89.17	89.90	90.62	91.35	92.07	92.80	93.52
146...	89.06	89.79	90.52	91.25	91.98	92.71	93.44	94.17
147...	89.67	90.40	91.14	91.87	92.61	93.34	94.08	94.81
148...	90.28	91.02	91.76	92.50	93.24	93.98	94.72	95.46
149...	90.89	91.63	92.38	93.12	93.87	94.61	95.36	96.10
150...	91.50	92.25	93.00	93.75	94.50	95.25	96.00	96.75
151...	92.11	92.86	93.62	94.37	95.13	95.88	96.64	97.39
152...	92.72	93.48	94.24	95.00	95.76	96.52	97.28	98.04
153...	93.33	94.09	94.86	95.62	96.39	97.15	97.92	98.68
154...	93.94	94.71	95.48	96.25	97.02	97.79	98.56	99.33
155...	94.55	95.32	96.10	96.87	97.65	98.42	99.20	99.97
156...	95.16	95.94	96.72	97.50	98.28	99.06	99.84	100.62
157...	95.77	96.55	97.34	98.12	98.91	99.69	100.48	101.26
158...	96.38	97.17	97.96	98.75	99.54	100.33	101.12	101.91
159...	96.99	97.78	98.58	99.37	100.17	100.96	101.76	102.55
160...	97.60	98.40	99.20	100.00	100.80	101.60	102.40	103.20

True per cent. of proof.	WINE-GALLONS.							
	65	65½	66	66½	67	67½	68	68½
40	26.00	26.20	26.40	26.60	26.80	27.00	27.20	27.40
41	26.65	26.85	27.06	27.26	27.47	27.67	27.88	28.08
42	27.30	27.51	27.72	27.93	28.14	28.35	28.56	28.77
43	27.95	28.16	28.38	28.59	28.81	29.02	29.24	29.45
44	28.60	28.82	29.04	29.26	29.48	29.70	29.92	30.14
45	29.25	29.47	29.70	29.92	30.15	30.37	30.60	30.82
46	29.90	30.13	30.36	30.59	30.82	31.05	31.28	31.51
47	30.55	30.78	31.02	31.25	31.49	31.72	31.96	32.19
48	31.20	31.44	31.68	31.92	32.16	32.40	32.64	32.88
49	31.85	32.09	32.34	32.58	32.83	33.07	33.32	33.56
50	32.50	32.75	33.00	33.25	33.50	33.75	34.00	34.25
51	33.15	33.40	33.66	33.91	34.17	34.42	34.68	34.93
52	33.80	34.06	34.32	34.58	34.84	35.10	35.36	35.62
53	34.45	34.71	34.98	35.24	35.51	35.77	36.04	36.30
54	35.10	35.37	35.64	35.91	36.18	36.45	36.72	36.99
55	35.75	36.02	36.30	36.57	36.85	37.12	37.40	37.67
56	36.40	36.68	36.96	37.24	37.52	37.80	38.08	38.36
57	37.05	37.33	37.62	37.90	38.19	38.47	38.76	39.04
58	37.70	37.99	38.28	38.57	38.86	39.15	39.44	39.73
59	38.35	38.64	38.94	39.23	39.53	39.82	40.12	40.41
60	39.00	39.30	39.60	39.90	40.20	40.50	40.80	41.10
61	39.65	39.95	40.26	40.56	40.87	41.17	41.48	41.78
62	40.30	40.61	40.92	41.23	41.54	41.85	42.16	42.47
63	40.95	41.26	41.58	41.89	42.21	42.52	42.84	43.15
64	41.60	41.92	42.24	42.56	42.88	43.20	43.52	43.84
65	42.25	42.57	42.90	43.22	43.55	43.87	44.20	44.52
66	42.90	43.23	43.56	43.89	44.22	44.55	44.88	45.21
67	43.55	43.88	44.22	44.55	44.89	45.22	45.56	45.89
68	44.20	44.54	44.88	45.22	45.56	45.90	46.24	46.58
69	44.85	45.19	45.54	45.88	46.23	46.57	46.92	47.26
70	45.50	45.85	46.20	46.55	46.90	47.25	47.60	47.95
71	46.15	46.50	46.86	47.21	47.57	47.92	48.28	48.63
72	46.80	47.16	47.52	47.88	48.24	48.60	48.96	49.32
73	47.45	47.81	48.18	48.54	48.91	49.27	49.64	50.00
74	48.10	48.47	48.84	49.21	49.58	49.95	50.32	50.69
75	48.75	49.12	49.50	49.87	50.25	50.62	51.00	51.37
76	49.40	49.78	50.16	50.54	50.92	51.30	51.68	52.06
77	50.05	50.43	50.82	51.20	51.59	51.97	52.35	52.74
78	50.70	51.09	51.48	51.87	52.26	52.65	53.04	53.43
79	51.35	51.74	52.14	52.53	52.93	53.32	53.72	54.11
80	52.00	52.40	52.80	53.20	53.60	54.00	54.40	54.80
81	52.65	53.05	53.46	53.86	54.27	54.67	55.08	55.48
82	53.30	53.71	54.12	54.53	54.94	55.35	55.76	56.17
83	53.95	54.36	54.78	55.19	55.61	56.02	56.44	56.85
84	54.60	55.02	55.44	55.85	56.28	56.70	57.12	57.54
85	55.25	55.67	56.10	56.52	56.95	57.37	57.80	58.22

True per cent. of proof.	WINE-GALLONS.							
	65	65½	66	66½	67	67½	68	68½
86...	55.90	56.33	56.76	57.19	57.62	58.05	58.48	58.91
87...	56.55	56.98	57.42	57.85	58.29	58.72	59.16	59.59
88...	57.20	57.64	58.08	58.52	58.96	59.40	59.84	60.28
89...	57.85	58.29	58.74	59.18	59.63	60.07	60.52	60.96
90...	58.50	58.95	59.40	59.85	60.30	60.75	61.20	61.65
91...	59.15	59.60	60.06	60.51	60.97	61.42	61.88	62.33
92...	59.80	60.26	60.72	61.18	61.64	62.10	62.56	63.02
93...	60.45	60.91	61.38	61.84	62.31	62.77	63.24	63.70
94...	61.10	61.57	62.04	62.51	62.98	63.45	63.92	64.39
95...	61.75	62.22	62.70	63.17	63.65	64.12	64.60	65.07
96...	62.40	62.88	63.36	63.84	64.32	64.80	65.28	65.76
97...	63.05	63.53	64.02	64.50	64.99	65.47	65.96	66.44
98...	63.70	64.19	64.68	65.17	65.66	66.15	66.64	67.13
99...	64.35	64.84	65.34	65.83	66.33	66.82	67.32	67.81
100...	65.00	65.50	66.00	66.50	67.00	67.50	68 00	68.50
101...	65.65	66.15	66.66	67.16	67.67	68.17	68.68	69.18
102...	66.30	66.81	67.32	67.83	68.34	68.85	69.36	69.87
103...	66.95	67.46	67.98	68.49	69.01	69.52	70.04	70.55
104...	67.60	68.12	68.64	69.16	69.68	70.20	70.72	71.24
105...	68.25	68.77	69.30	69.82	70.35	70.87	71.40	71.92
106...	68.90	69.43	69.96	70.49	71.02	71.55	72.08	72.61
107...	69.55	70.08	70.62	71.15	71.69	72.22	72.76	73.29
108...	70.20	70.74	71.28	71.82	72.36	72.90	73.44	73.98
109...	70.85	71.39	71.94	72.48	73.03	73.57	74.12	74.66
110...	71.50	72.05	72.60	73.15	73.70	74.25	74.80	75.35
111...	72.15	72.70	73.26	73.81	74.37	74.92	75.48	76.03
112...	72.80	73.36	73.92	74.48	75.04	75.60	76.16	76.72
113...	73.45	74.01	74.58	75.14	75.71	76.27	76.84	77.40
114...	74.10	74.67	75.24	75.81	76.38	76.95	77.52	78.09
115...	74.75	75.32	75.90	76.47	77.05	77.62	78.20	78.77
116...	75.40	75.98	76.56	77.14	77.72	78.30	78.88	79.46
117...	76.05	76.63	77.22	77.80	78.39	78.97	79.56	80.14
118...	76.70	77.29	77.88	78.47	79.06	79.65	80.24	80.83
119...	77.35	77.94	78.54	79.13	79.73	80.32	80.92	81.51
120...	78.00	78.60	79.20	79.80	80.40	81.00	81.60	82.20
121...	78.65	79.25	79.86	80.46	81.07	81.67	82.28	82.88
122...	79.30	79.91	80.52	81.13	81.74	82.35	82.96	83.57
123...	79.95	80.56	81.18	81.79	82.41	83.02	83.64	84.25
124...	80.60	81.22	81.84	82.46	83.08	83.70	84.32	84.94
125...	81.25	81.87	82.50	83.12	83.75	84.37	85.00	85.62
126...	81.90	82.53	83.16	83.79	84.42	85.05	85.68	86.31
127...	82.55	83.18	83.82	84.45	85.09	85.72	86.36	86.99
128...	83.20	83.84	84.48	85.12	85.76	86.40	87.04	87.68
129...	83.85	84.49	85.14	85.78	86.43	87.07	87.72	88.36
130...	84.50	85.15	85.80	86.45	87.10	87.75	88.40	89.05
131...	85.15	85.80	86.46	87.11	87.77	88.42	89.08	89.73

True per cent. of proof.	WINE-GALLONS.							
	65	65½	66	66½	67	67½	68	68½
132...	85.80	86.46	87.12	87.78	88.44	89.10	89.76	90.42
133...	86.45	87.11	87.78	88.44	89.11	89.77	90.44	91.10
134...	87.10	87.77	88.44	89.11	89.78	90.45	91.12	91.79
135...	87.75	88.42	89.10	89.77	90.45	91.12	91.80	92.47
136...	88.40	89.08	89.76	90.44	91.12	91.80	92.48	93.16
137...	89.05	89.73	90.42	91.10	91.79	92.47	93.16	93.84
138...	89.70	90.39	91.08	91.77	92.46	93.15	93.84	94.53
139...	90.35	91.04	91.74	92.43	93.13	93.82	94.52	95.21
140...	91.00	91.70	92.40	93.10	93.80	94.50	95.20	95.90
141...	91.65	92.35	93.06	93.76	94.47	95.17	95.88	96.58
142...	92.30	93.01	93.72	94.43	95.14	95.85	96.56	97.27
143...	92.95	93.66	94.38	95.09	95.81	96.52	97.24	97.95
144...	93.60	94.32	95.04	95.76	96.48	97.20	97.92	98.64
145...	94.25	94.97	95.70	96.42	97.15	97.87	98.60	99.32
146...	94.90	95.63	96.36	97.09	97.82	98.55	99.28	100.01
147...	95.55	96.28	97.02	97.75	98.49	99.22	99.96	100.69
148...	96.20	96.94	97.68	98.42	99.16	99.90	100.64	101.38
149...	96.85	97.59	98.34	99.08	99.83	100.57	101.32	102.06
150...	97.50	98.25	99.00	99.75	100.50	101.25	102.00	102.75
151...	98.15	98.90	99.66	100.41	101.17	101.92	102.68	103.43
152...	98.80	99.56	100.32	101.08	101.84	102.60	103.36	104.12
153...	99.45	100.21	100.98	101.74	102.51	103.27	104.04	104.80
154...	100.10	100.87	101.64	102.41	103.18	103.95	104.72	105.49
155...	100.75	101.52	102.30	103.07	103.85	104.62	105.40	106.17
156...	101.40	102.18	102.96	103.74	104.52	105.30	106.08	106.86
157...	102.05	102.83	103.62	104.40	105.19	105.97	106.76	107.54
158...	102.70	103.49	104.28	105.07	105.86	106.65	107.44	108.23
159...	103.35	104.14	104.94	105.73	106.53	107.32	108.12	108.91
160...	104.00	104.80	105.60	106.40	107.20	108.00	108.80	109.60

True per cent. of proof.	WINE-GALLONS.							
	69	69½	70	70½	71	71½	72	72½
40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00
41	28.29	28.49	28.70	28.90	29.11	29.31	29.52	29.72
42	28.98	29.19	29.40	29.61	29.82	30.03	30.24	30.45
43	29.67	29.88	30.10	30.31	30.53	30.74	30.96	31.17
44	30.36	30.58	30.80	31.02	31.24	31.46	31.68	31.90
45	31.05	31.27	31.50	31.72	31.95	32.17	32.40	32.62
46	31.74	31.97	32.20	32.43	32.66	32.89	33.12	33.35
47	32.43	32.66	32.90	33.13	33.37	33.60	33.84	34.07
48	33.12	33.36	33.60	33.84	34.08	34.32	34.56	34.80
49	33.81	34.05	34.30	34.54	34.79	35.03	35.28	35.52
50	34.50	34.75	35.00	35.25	35.50	35.75	36.00	36.25
51	35.19	35.44	35.70	35.95	36.21	36.46	36.72	36.97
52	35.88	36.14	36.40	36.66	36.92	37.18	37.44	37.70
53	36.57	36.83	37.10	37.36	37.63	37.89	38.16	38.42
54	37.26	37.53	37.80	38.07	38.34	38.61	38.88	39.15
55	37.95	38.22	38.50	38.77	39.05	39.32	39.60	39.87
56	38.64	38.92	39.20	39.48	39.76	40.04	40.32	40.60
57	39.33	39.61	39.90	40.18	40.47	40.75	41.04	41.32
58	40.02	40.31	40.60	40.89	41.18	41.47	41.76	42.05
59	40.71	41.00	41.30	41.59	41.89	42.18	42.48	42.77
60	41.40	41.70	42.00	42.30	42.60	42.90	43.20	43.50
61	42.09	42.39	42.70	43.00	43.31	43.61	43.92	44.22
62	42.78	43.09	43.40	43.71	44.02	44.33	44.64	44.95
63	43.47	43.78	44.10	44.41	44.73	45.04	45.36	45.67
64	44.16	44.48	44.80	45.12	45.44	45.76	46.08	46.40
65	44.85	45.17	45.50	45.82	46.15	46.47	46.80	47.12
66	45.54	45.87	46.20	46.53	46.86	47.19	47.52	47.85
67	46.23	46.56	46.90	47.23	47.57	47.90	48.24	48.57
68	46.92	47.26	47.60	47.94	48.28	48.62	48.96	49.30
69	47.61	47.95	48.30	48.64	48.99	49.33	49.68	50.02
70	48.30	48.65	49.00	49.35	49.70	50.05	50.40	50.75
71	48.99	49.34	49.70	50.05	50.41	50.76	51.12	51.47
72	49.68	50.04	50.40	50.76	51.12	51.48	51.84	52.20
73	50.37	50.73	51.10	51.46	51.83	52.19	52.56	52.92
74	51.06	51.43	51.80	52.17	52.54	52.91	53.28	53.65
75	51.75	52.12	52.50	52.87	53.25	53.62	54.00	54.37
76	52.44	52.82	53.20	53.58	53.96	54.34	54.72	55.10
77	53.13	53.51	53.90	54.28	54.67	55.05	55.44	55.82
78	53.82	54.21	54.60	54.99	55.38	55.77	56.16	56.55
79	54.51	54.90	55.30	55.69	56.09	56.48	56.88	57.27
80	55.20	55.60	56.00	56.40	56.80	57.20	57.60	58.00
81	55.89	56.29	56.70	57.10	57.51	57.91	58.32	58.72
82	56.58	56.99	57.40	57.81	58.22	58.63	59.04	59.45
83	57.27	57.68	58.10	58.51	58.93	59.34	59.76	60.17
84	57.96	58.38	58.80	59.22	59.64	60.06	60.48	60.90
85	58.65	59.07	59.50	59.92	60.35	60.77	61.20	61.62

True per cent. of proof.	WINE-GALLONS.							
	69	69½	70	70½	71	71½	72	72½
86...	59.34	59.77	60.20	60.63	61.06	61.49	61.92	62.35
87...	60.03	60.46	60.90	61.33	61.77	62.20	62.64	63.07
88...	60.72	61.16	61.60	62.04	62.48	62.92	63.36	63.80
89...	61.41	61.85	62.30	62.74	63.19	63.63	64.08	64.52
90...	62.10	62.55	63.00	63.45	63.90	64.35	64.80	65.25
91...	62.79	63.24	63.70	64.15	64.61	65.06	65.52	65.97
92...	63.48	63.94	64.40	64.86	65.32	65.78	66.24	66.70
93...	64.17	64.63	65.10	65.56	66.03	66.49	66.96	67.42
94...	64.86	65.33	65.80	66.27	66.74	67.21	67.68	68.15
95...	65.55	66.02	66.50	66.97	67.45	67.92	68.40	68.87
96...	66.24	66.72	67.20	67.68	68.16	68.64	69.12	69.60
97...	66.93	67.41	67.90	68.38	68.87	69.35	69.84	70.32
98...	67.62	68.11	68.60	69.09	69.58	70.07	70.56	71.05
99...	68.31	68.80	69.30	69.79	70.29	70.78	71.28	71.77
100...	69.00	69.50	70.00	70.50	71.00	71.50	72.00	72.50
101...	69.69	70.19	70.70	71.20	71.71	72.21	72.72	73.22
102...	70.38	70.89	71.40	71.91	72.42	72.93	73.44	73.95
103...	71.07	71.58	72.10	72.61	73.13	73.64	74.16	74.67
104...	71.76	72.28	72.80	73.32	73.84	74.36	74.88	75.40
105...	72.45	72.97	73.50	74.02	74.55	75.07	75.60	76.12
106...	73.14	73.67	74.20	74.73	75.26	75.79	76.32	76.85
107...	73.83	74.36	74.90	75.43	75.97	76.50	77.04	77.57
108...	74.52	75.06	75.60	76.14	76.68	77.22	77.76	78.30
109...	75.21	75.75	76.30	76.84	77.39	77.93	78.48	79.02
110...	75.90	76.45	77.00	77.55	78.10	78.65	79.20	79.75
111...	76.59	77.14	77.70	78.25	78.81	79.36	79.92	80.47
112...	77.28	77.84	78.40	78.96	79.52	80.08	80.64	81.20
113...	77.97	78.53	79.10	79.66	80.23	80.79	81.36	81.92
114...	78.66	79.23	79.80	80.37	80.94	81.51	82.08	82.65
115...	79.35	79.92	80.50	81.07	81.65	82.22	82.80	83.37
116...	80.04	80.62	81.20	81.78	82.36	82.94	83.52	84.10
117...	80.73	81.31	81.90	82.48	83.07	83.65	84.24	84.82
118...	81.42	82.01	82.60	83.19	83.78	84.37	84.96	85.55
119...	82.11	82.70	83.30	83.89	84.49	85.08	85.68	86.27
120...	82.80	83.40	84.00	84.60	85.20	85.80	86.40	87.00
121...	83.49	84.09	84.70	85.30	85.91	86.51	87.12	87.72
122...	84.18	84.79	85.40	86.01	86.62	87.23	87.84	88.45
123...	84.87	85.48	86.10	86.71	87.33	87.94	88.56	89.17
124...	85.56	86.18	86.80	87.42	88.04	88.66	89.28	89.90
125...	86.25	86.87	87.50	88.12	88.75	89.37	90.00	90.62
126...	86.94	87.57	88.20	88.83	89.46	90.09	90.72	91.35
127...	87.63	88.26	88.90	89.53	90.17	90.80	91.44	92.07
128...	88.32	88.96	89.60	90.24	90.88	91.52	92.16	92.80
129...	89.01	89.65	90.30	90.94	91.59	92.23	92.88	93.52
130...	89.70	90.35	91.00	91.65	92.30	92.95	93.60	94.25
131...	90.39	91.04	91.70	92.35	93.01	93.66	94.32	94.97

True per cent. of proof.	WINE-GALLONS.							
	69	69½	70	70½	71	71½	72	72½
132...	91.08	91.74	92.40	93.06	93.72	94.38	95.04	95.70
133...	91.77	92.43	93.10	93.76	94.43	95.09	95.76	96.42
134...	92.46	93.13	93.80	94.47	95.14	95.81	96.48	97.15
135...	93.15	93.82	94.50	95.17	95.85	96.52	97.20	97.87
136...	93.84	94.52	95.20	95.88	96.56	97.24	97.92	98.60
137...	94.53	95.21	95.90	96.58	97.27	97.95	98.64	99.32
138...	95.22	95.91	96.60	97.29	97.98	98.67	99.36	100.05
139...	95.91	96.60	97.30	97.99	98.69	99.38	100.08	100.77
140...	96.60	97.30	98.00	98.70	99.40	100.10	100.80	101.50
141...	97.29	97.99	98.70	99.40	100.11	100.81	101.52	102.22
142...	97.98	98.69	99.40	100.11	100.82	101.53	102.24	102.95
143...	98.67	99.38	100.10	100.81	101.53	102.24	102.95	103.67
144...	99.36	100.08	100.80	101.52	102.24	102.96	103.68	104.40
145...	100.05	100.77	101.50	102.22	102.95	103.67	104.40	105.12
146...	100.74	101.47	102.20	102.93	103.66	104.39	105.12	105.85
147...	101.43	102.16	102.90	103.63	104.37	105.10	105.84	106.57
148...	102.12	102.86	103.60	104.34	105.08	105.82	106.56	107.30
149...	102.81	103.55	104.30	105.04	105.79	106.53	107.28	108.02
150...	103.50	104.25	105.00	105.75	106.50	107.25	108.00	108.75
151...	104.19	104.94	105.70	106.45	107.21	107.96	108.72	109.47
152...	104.88	105.64	106.40	107.16	107.92	108.68	109.44	110.20
153...	105.57	106.33	107.10	107.86	108.63	109.39	110.16	110.92
154...	106.26	107.03	107.80	108.57	109.34	110.11	110.88	111.65
155...	106.95	107.72	108.50	109.27	110.05	110.82	111.60	112.37
156...	107.64	108.42	109.20	109.98	110.76	111.54	112.32	113.10
157...	108.33	109.11	109.90	110.68	111.47	112.25	113.04	113.82
158...	109.02	109.81	110.60	111.39	112.18	112.97	113.76	114.55
159...	109.71	110.50	111.30	112.09	112.89	113.68	114.48	115.27
160...	110.40	111.20	112.00	112.80	113.60	114.40	115.20	116.00

True per cent. of proof.	WINE-GALLONS.							
	73	73½	74	74½	75	75½	76	76½
40	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
41	29.93	30.13	30.34	30.54	30.75	30.95	31.16	31.36
42	30.66	30.87	31.08	31.29	31.50	31.71	31.92	32.13
43	31.39	31.60	31.82	32.03	32.25	32.46	32.68	32.89
44	32.12	32.34	32.56	32.78	33.00	33.22	33.44	33.66
45	32.85	33.07	33.30	33.52	33.75	33.97	34.20	34.42
46	33.58	33.81	34.04	34.27	34.50	34.73	34.96	35.19
47	34.31	34.54	34.78	35.01	35.25	35.48	35.72	35.95
48	35.04	35.28	35.52	35.76	36.00	36.24	36.48	36.72
49	35.77	36.01	36.26	36.50	36.75	36.99	37.24	37.48
50	36.50	36.75	37.00	37.25	37.50	37.75	38.00	38.25
51	37.23	37.48	37.74	37.99	38.25	38.50	38.76	39.01
52	37.96	38.22	38.48	38.74	39.00	39.26	39.52	39.78
53	38.69	38.95	39.22	39.48	39.75	40.01	40.28	40.54
54	39.42	39.69	39.96	40.23	40.50	40.77	41.04	41.31
55	40.15	40.42	40.70	40.97	41.25	41.52	41.80	42.07
56	40.88	41.16	41.44	41.72	42.00	42.28	42.56	42.84
57	41.61	41.89	42.18	42.46	42.75	43.03	43.32	43.60
58	42.34	42.63	42.92	43.21	43.50	43.79	44.08	44.37
59	43.07	43.36	43.66	43.95	44.25	44.54	44.84	45.13
60	43.80	44.10	44.40	44.70	45.00	45.30	45.60	45.90
61	44.53	44.83	45.14	45.44	45.75	46.05	46.36	46.66
62	45.26	45.57	45.88	46.19	46.50	46.81	47.12	47.43
63	45.99	46.30	46.62	46.93	47.25	47.56	47.88	48.19
64	46.72	47.04	47.36	47.68	48.00	48.32	48.64	48.96
65	47.45	47.77	48.10	48.42	48.75	49.07	49.40	49.72
66	48.18	48.51	48.84	49.17	49.50	49.83	50.16	50.49
67	48.91	49.24	49.58	49.91	50.25	50.58	50.92	51.25
68	49.64	49.98	50.32	50.66	51.00	51.34	51.68	52.02
69	50.37	50.71	51.06	51.40	51.75	52.09	52.44	52.78
70	51.10	51.45	51.80	52.15	52.50	52.85	53.20	53.55
71	51.83	52.18	52.54	52.89	53.25	53.60	53.96	54.31
72	52.56	52.92	53.28	53.64	54.00	54.36	54.72	55.08
73	53.29	53.65	54.02	54.38	54.75	55.11	55.48	55.84
74	54.02	54.39	54.76	55.13	55.50	55.87	56.24	56.61
75	54.75	55.12	55.50	55.87	56.25	56.62	57.00	57.37
76	55.48	55.86	56.24	56.62	57.00	57.38	57.76	58.14
77	56.21	56.59	56.98	57.36	57.75	58.13	58.52	58.90
78	56.94	57.33	57.72	58.11	58.50	58.89	59.28	59.67
79	57.67	58.06	58.46	58.85	59.25	59.64	60.04	60.43
80	58.40	58.80	59.20	59.60	60.00	60.40	60.80	61.20
81	59.13	59.53	59.94	60.34	60.75	61.15	61.56	61.96
82	59.86	60.27	60.68	61.09	61.50	61.91	62.32	62.73
83	60.59	61.00	61.42	61.83	62.25	62.66	63.08	63.49
84	61.32	61.74	62.16	62.58	63.00	63.42	63.84	64.26
85	62.05	62.47	62.90	63.32	63.75	64.17	64.60	65.02

True per cent. of proof.	WINE-GALLONS.							
	73	73½	74	74½	75	75½	76	76½
86...	62.78	63.21	63.64	64.07	64.50	64.93	65.36	65.79
87...	63.51	63.94	64.38	64.81	65.25	65.68	66.12	66.55
88...	64.24	64.68	65.12	65.56	66.00	66.44	66.88	67.32
89...	64.97	65.41	65.86	66.30	66.75	67.19	67.64	68.08
90...	65.70	66.15	66.60	67.05	67.50	67.95	68.40	68.85
91...	66.43	66.88	67.34	67.79	68.25	68.70	69.15	69.61
92...	67.16	67.62	68.08	68.54	69.00	69.46	69.92	70.38
93...	67.89	68.35	68.82	69.28	69.75	70.21	70.68	71.14
94...	68.62	69.09	69.56	70.03	70.50	70.97	71.44	71.91
95...	69.35	69.82	70.30	70.77	71.25	71.72	72.20	72.67
96...	70.08	70.56	71.04	71.52	72.00	72.48	72.96	73.44
97...	70.81	71.29	71.78	72.26	72.75	73.23	73.72	74.20
98...	71.54	72.03	72.52	73.01	73.50	73.99	74.48	74.97
99...	72.27	72.76	73.26	73.75	74.25	74.74	75.24	75.73
100...	73.00	73.50	74.00	74.50	75.00	75.50	76.00	76.50
101...	73.73	74.23	74.74	75.24	75.75	76.25	76.76	77.26
102...	74.46	74.97	75.48	75.99	76.50	77.01	77.52	78.03
103...	75.19	75.70	76.22	76.73	77.25	77.76	78.28	78.79
104...	75.92	76.44	76.96	77.48	78.00	78.52	79.04	79.56
105...	76.65	77.17	77.70	78.22	78.75	79.27	79.80	80.32
106...	77.38	77.91	78.44	78.97	79.50	80.03	80.56	81.09
107...	78.11	78.64	79.18	79.71	80.25	80.78	81.32	81.85
108...	78.84	79.38	79.92	80.46	81.00	81.54	82.08	82.62
109...	79.57	80.11	80.66	81.20	81.75	82.29	82.84	83.38
110...	80.30	80.85	81.40	81.95	82.50	83.05	83.60	84.15
111...	81.03	81.58	82.14	82.69	83.25	83.80	84.36	84.91
112...	81.76	82.32	82.88	83.44	84.00	84.56	85.12	85.68
113...	82.49	83.05	83.62	84.18	84.75	85.31	85.88	86.44
114...	83.22	83.79	84.36	84.93	85.50	86.07	86.64	87.21
115...	83.95	84.52	85.10	85.67	86.25	86.82	87.40	87.97
116...	84.68	85.26	85.84	86.42	87.00	87.58	88.16	88.74
117...	85.41	85.99	86.58	87.16	87.75	88.33	88.92	89.50
118...	86.14	86.73	87.32	87.91	88.50	89.09	89.68	90.27
119...	86.87	87.46	88.06	88.65	89.25	89.84	90.44	91.03
120...	87.60	88.20	88.80	89.40	90.00	90.60	91.20	91.80
121...	88.33	88.93	89.54	90.14	90.75	91.35	91.96	92.56
122...	89.06	89.67	90.28	90.89	91.50	92.11	92.72	93.33
123...	89.79	90.40	91.02	91.63	92.25	92.86	93.48	94.09
124...	90.52	91.14	91.76	92.38	93.00	93.62	94.24	94.86
125...	91.25	91.87	92.50	93.12	93.75	94.37	95.00	95.62
126...	91.98	92.61	93.24	93.87	94.50	95.13	95.76	96.39
127...	92.71	93.34	93.98	94.61	95.25	95.88	96.52	97.15
128...	93.44	94.08	94.72	95.36	96.00	96.64	97.28	97.92
129...	94.17	94.81	95.46	96.10	96.75	97.39	98.04	98.68
130...	94.90	95.55	96.20	96.85	97.50	98.15	98.80	99.45
131...	95.63	96.28	96.94	97.59	98.25	98.90	99.56	100.21

True per cent. of proof.	WINE-GALLONS.							
	73	73½	74	74½	75	75½	76	76½
132...	96.36	97.02	97.68	98.34	99.00	99.66	100.32	100.98
133...	97.09	97.75	98.42	99.08	99.75	100.41	101.08	101.74
134...	97.82	98.49	99.16	99.83	100.50	101.17	101.84	102.51
135...	98.55	99.22	99.90	100.57	101.25	101.92	102.60	103.27
136...	99.28	99.96	100.64	101.32	102.00	102.68	103.36	104.04
137...	100.01	100.69	101.38	102.06	102.75	103.43	104.12	104.80
138...	100.74	101.43	102.12	102.81	103.50	104.19	104.88	105.57
139...	101.47	102.16	102.86	103.55	104.25	104.94	105.64	106.33
140...	102.20	102.90	103.60	104.30	105.00	105.70	106.40	107.10
141...	102.93	103.63	104.34	105.04	105.75	106.45	107.16	107.86
142...	103.66	104.37	105.08	105.79	106.50	107.21	107.92	108.63
143...	104.39	105.10	105.82	106.53	107.25	107.96	108.68	109.39
144...	105.12	105.84	106.56	107.28	108.00	108.72	109.44	110.16
145...	105.85	106.57	107.30	108.02	108.75	109.47	110.20	110.92
146...	106.58	107.31	108.04	108.77	109.50	110.23	110.96	111.69
147...	107.31	108.04	108.78	109.51	110.25	110.98	111.72	112.45
148...	108.04	108.78	109.52	110.26	111.00	111.74	112.48	113.22
149...	108.77	109.51	110.26	111.00	111.75	112.49	113.24	113.98
150...	109.50	110.25	111.00	111.75	112.50	113.25	114.00	114.75
151...	110.23	110.98	111.74	112.49	113.25	114.00	114.76	115.51
152...	110.96	111.72	112.48	113.24	114.00	114.76	115.52	116.28
153...	111.69	112.45	113.22	113.98	114.75	115.51	116.28	117.04
154...	112.42	113.19	113.96	114.73	115.50	116.27	117.04	117.81
155...	113.15	113.92	114.70	115.47	116.25	117.02	117.80	118.57
156...	113.88	114.66	115.44	116.22	117.00	117.78	118.56	119.34
157...	114.61	115.39	116.18	116.96	117.75	118.53	119.32	120.10
158...	115.34	116.13	116.92	117.71	118.50	119.29	120.08	120.87
159...	116.07	116.86	117.66	118.45	119.25	120.04	120.84	121.63
160...	116.80	117.60	118.40	119.20	120.00	120.80	121.60	122.40

True per cent. of proof.	WINE-GALLONS.							
	77	77½	78	78½	79	79½	80	80½
40	30.80	31.00	31.20	31.40	31.60	31.80	32.00	32.20
41	31.57	31.77	31.98	32.18	32.39	32.59	32.80	33.00
42	32.34	32.55	32.76	32.97	33.18	33.39	33.60	33.81
43	33.11	33.32	33.54	33.75	33.97	34.18	34.40	34.61
44	33.88	34.10	34.32	34.54	34.76	34.98	35.20	35.42
45	34.65	34.87	35.10	35.32	35.55	35.77	36.00	36.22
46	35.42	35.6[illegible]	35.88	36.11	36.34	36.57	36.80	37.03
47	36.19	36.42	36.66	36.89	37.13	37.36	37.60	37.83
48	36.96	37.20	37.44	37.68	37.92	38.16	38.40	38.64
49	37.73	37.97	38.22	38.46	38.71	38.95	39.20	39.44
50	38.50	38.75	39.00	39.25	39.50	39.75	40.00	40.25
51	39.27	39.52	39.78	40.03	40.29	40.54	40.80	41.05
52	40.04	40.30	40.56	40.82	41.08	41.34	41.60	41.86
53	40.81	41.07	41.34	41.60	41.87	42.13	42.40	42.66
54	41.58	41.85	42.12	42.39	42.66	42.93	43.20	43.47
55	42.35	42.62	42.90	43.17	43.45	43.72	44.00	44.27
56	43.12	43.40	43.68	43.96	44.24	44.52	44.80	45.08
57	43.89	44.17	44.46	44.74	45.03	45.31	45.60	45.88
58	44.66	44.95	45.24	45.53	45.82	46.11	46.40	46.69
59	45.43	45.72	46.02	46.31	46.61	46.90	47.20	47.49
60	46.20	46.50	46.80	47.10	47.40	47.70	48.00	48.30
61	46.97	47.27	47.58	47.88	48.19	48.49	48.80	49.10
62	47.74	48.05	48.36	48.67	48.98	49.29	49.60	49.91
63	48.51	48.82	49.14	49.45	49.77	50.08	50.40	50.71
64	49.28	49.60	49.92	50.24	50.56	50.88	51.20	51.52
65	50.05	50.37	50.70	51.02	51.35	51.67	52.00	52.32
66	50.82	51.15	51.48	51.81	52.14	52.47	52.80	53.13
67	51.59	51.92	52.26	52.59	52.93	53.26	53.60	53.93
68	52.36	52.70	53.04	53.38	53.72	54.06	54.40	54.74
69	53.13	53.47	53.82	54.16	54.51	54.85	55.20	55.54
70	53.90	54.25	54.60	54.95	55.30	55.65	56.00	56.35
71	54.67	55.02	55.38	55.73	56.09	56.44	56.80	57.15
72	55.44	55.80	56.16	56.52	56.88	57.24	57.60	57.96
73	56.21	56.57	56.94	57.30	57.67	58.03	58.40	58.76
74	56.98	57.35	57.72	58.09	58.46	58.83	59.20	59.57
75	57.75	58.12	58.50	58.87	59.25	59.62	60.00	60.37
76	58.52	58.90	59.28	59.66	60.04	60.42	60.80	61.18
77	59.29	59.67	60.06	60.44	60.83	61.21	61.60	61.98
78	60.06	60.45	60.84	61.23	61.62	62.01	62.40	62.79
79	60.83	61.22	61.62	62.01	62.41	62.80	63.20	63.59
80	61.60	62.00	62.40	62.80	63.20	63.60	64.00	64.40
81	62.37	62.77	63.18	63.58	63.99	64.39	64.80	65.20
82	63.14	63.55	63.96	64.37	64.78	65.19	65.60	66.01
83	63.91	64.32	64.74	65.15	65.57	65.98	66.40	66.81
84	64.68	65.10	65.52	65.94	66.36	66.78	67.20	67.62
85	65.45	65.87	66.30	66.72	67.15	67.57	68.00	68.42

True per cent. of proof.	WINE-GALLONS.							
	77	77½	78	78½	79	79½	80	80½
86...	66.22	66.65	67.08	67.51	67.94	68.37	68.80	69.23
87...	66.99	67.42	67.86	68.29	68.73	69.16	69.60	70.03
88...	67.76	68.20	68.64	69.08	69.52	69.96	70.40	70.84
89...	68.53	68.97	69.42	69.86	70.31	70.75	71.20	71.64
90...	69.30	69.75	70.20	70.65	71.10	71.55	72.00	72.45
91...	70.07	70.52	70.98	71.43	71.89	72.34	72.80	73.25
92...	70.84	71.30	71.76	72.22	72.68	73.14	73.60	74.06
93...	71.61	72.07	72.54	73.00	73.47	73.93	74.40	74.86
94...	72.38	72.85	73.32	73.79	74.26	74.73	75.20	75.67
95...	73.15	73.62	74.10	74.57	75.05	75.52	76.00	76.47
96...	73.92	74.40	74.88	75.36	75.84	76.32	76.80	77.28
97...	74.69	75.17	75.66	76.14	76.63	77.11	77.60	78.08
98...	75.46	75.95	76.44	76.93	77.42	77.91	78.40	78.89
99...	76.23	76.72	77.22	77.71	78.21	78.70	79.20	79.69
100...	77.00	77.50	78.00	78.50	79.00	79.50	80.00	80.50
101...	77.77	78.27	78.78	79.28	79.79	80.29	80.80	81.30
102...	78.54	79.05	79.56	80.07	80.58	81.09	81.60	82.11
103...	79.31	79.82	80.34	80.85	81.37	81.88	82.40	82.91
104...	80.08	80.60	81.12	81.64	82.16	82.68	83.20	83.72
105...	80.85	81.37	81.90	82.42	82.95	83.47	84.00	84.52
106...	81.62	82.15	82.68	83.21	83.74	84.27	84.80	85.33
107...	82.39	82.92	83.46	83.99	84.53	85.06	85.60	86.13
108...	83.16	83.70	84.24	84.78	85.32	85.86	86.40	86.94
109...	83.93	84.47	85.02	85.56	86.11	86.65	87.20	87.74
110...	84.70	85.25	85.80	86.35	86.90	87.45	88.00	88.55
111...	85.47	86.02	86.58	87.13	87.69	88.24	88.80	89.35
112...	86.24	86.80	87.36	87.92	88.48	89.04	89.60	90.16
113...	87.01	87.57	88.14	88.70	89.27	89.83	90.40	90.96
114...	87.78	88.35	88.92	89.49	90.06	90.63	91.20	91.77
115...	88.55	89.12	89.70	90.27	90.85	91.42	92.00	92.57
116...	89.32	89.90	90.48	91.06	91.64	92.22	92.80	93.38
117...	90.09	90.67	91.26	91.84	92.43	93.01	93.60	94.18
118...	90.86	91.45	92.04	92.63	93.22	93.81	94.40	94.99
119...	91.63	92.22	92.82	93.41	94.01	94.60	95.20	95.79
120...	92.40	93.00	93.60	94.20	94.80	95.40	96.00	96.60
121...	93.17	93.77	94.38	94.98	95.59	96.19	96.80	97.40
122...	93.94	94.55	95.16	95.77	96.38	96.99	97.60	98.21
123...	94.71	95.32	95.94	96.55	97.17	97.78	98.40	99.01
124...	95.48	96.10	96.72	97.34	97.96	98.58	99.20	99.82
125...	96.25	96.87	97.50	98.12	98.75	99.37	100.00	100.62
126...	97.02	97.65	98.28	98.91	99.54	100.17	100.80	101.43
127...	97.79	98.42	99.06	99.69	100.33	100.96	101.60	102.23
128...	98.56	99.20	99.84	100.48	101.12	101.76	102.40	103.04
129...	99.33	99.97	100.62	101.26	101.91	102.55	103.20	103.84
130...	100.10	100.75	101.40	102.05	102.70	103.35	104.00	104.65
131...	100.87	101.52	102.18	102.83	103.49	104.14	104.80	105.45

True per cent. of proof.	WINE-GALLONS.							
	77	77½	78	78½	79	79½	80	80½
132...	101.64	102.30	102.96	103.62	104.28	104.94	105.60	106.26
133...	102.41	103.07	103.74	104.40	105.07	105.73	106.40	107.06
134...	103.18	103.85	104.52	105.19	105.86	106.53	107.20	107.87
135...	103.95	104.62	105.30	105.97	106.65	107.32	108.00	108.67
136...	104.72	105.40	106.08	106.76	107.44	108.12	108.80	109.48
137...	105.49	106.17	106.86	107.54	108.23	108.91	109.60	110.28
138...	106.26	106.95	107.64	108.33	109.02	109.70	110.40	111.09
139...	107.03	107.72	108.42	109.11	109.81	110.50	111.20	111.89
140...	107.80	108.50	109.20	109.90	110.60	111.30	112.00	112.70
141...	108.57	109.27	109.98	110.68	111.39	112.09	112.80	113.50
142...	109.34	110.05	110.76	111.47	112.18	112.89	113.60	114.31
143...	110.11	110.82	111.54	112.25	112.97	113.68	114.40	115.11
144...	110.88	111.60	112.32	113.04	113.76	114.48	115.20	115.92
145...	111.65	112.37	113.10	113.82	114.55	115.27	116.00	116.72
146...	112.42	113.15	113.88	114.61	115.34	116.07	116.80	117.53
147...	113.19	113.92	114.66	115.39	116.13	116.86	117.60	118.33
148...	113.96	114.70	115.44	116.18	116.92	117.66	118.40	119.14
149...	114.73	115.47	116.22	116.96	117.71	118.45	119.20	119.94
150...	115.50	116.25	117.00	117.75	118.50	119.25	120.00	120.75
151...	116.27	117.02	117.78	118.53	119.29	120.04	120.80	121.55
152...	117.04	117.80	118.56	119.32	120.08	120.84	121.60	122.36
153...	117.81	118.57	119.34	120.10	120.87	121.63	122.40	123.16
154...	118.58	119.35	120.12	120.89	121.66	122.43	123.20	123.97
155...	119.35	120.12	120.90	121.67	122.45	123.22	124.00	124.77
156...	120.12	120.90	121.68	122.46	123.24	124.02	124.80	125.58
157...	120.89	121.67	122.46	123.24	124.03	124.81	125.60	126.38
158...	121.66	122.45	123.24	124.03	124.82	125.61	126.40	127.19
159...	122.43	123.22	124.02	124.81	125.61	126.40	127.20	127.99
160...	123.20	124.00	124.80	125.60	126.40	127.20	128.00	128.80

True per cent. of proof.	WINE-GALLONS.							
	81	81½	82	82½	83	83½	84	84½
40	32.40	32.60	32.80	33.00	33.20	33.40	33.60	33.80
41	33.21	33.41	33.62	33.82	34.03	34.23	34.44	34.64
42	34.02	34.23	34.44	34.65	34.86	35.07	35.28	35.49
43	34.83	35.04	35.26	35.47	35.69	35.90	36.12	36.33
44	35.64	35.86	36.08	36.30	36.52	36.74	36.96	37.18
45	36.45	36.67	36.90	37.12	37.35	37.57	37.80	38.02
46	37.26	37.49	37.72	37.95	38.18	38.41	38.64	38.87
47	38.07	38.30	38.54	38.77	39.01	39.24	39.48	39.71
48	38.88	39.12	39.36	39.60	39.84	40.08	40.32	40.56
49	39.69	39.93	40.18	40.42	40.67	40.91	41.16	41.40
50	40.50	40.75	41.00	41.25	41.50	41.75	42.00	42.25
51	41.31	41.56	41.82	42.07	42.33	42.58	42.84	43.09
52	42.12	42.38	42.64	42.90	43.16	43.42	43.68	43.94
53	42.93	43.19	43.46	43.72	43.99	44.25	44.52	44.78
54	43.74	44.01	44.28	44.55	44.82	45.09	45.36	45.63
55	44.55	44.82	45.10	45.37	45.65	45.92	46.20	46.47
56	45.36	45.64	45.92	46.20	46.48	46.76	47.04	47.32
57	46.17	46.45	46.74	47.02	47.31	47.59	47.88	48.16
58	46.98	47.27	47.56	47.85	48.14	48.43	48.72	49.01
59	47.79	48.08	48.38	48.67	48.97	49.26	49.56	49.85
60	48.60	48.90	49.20	49.50	49.80	50.10	50.40	50.70
61	49.41	49.71	50.02	50.32	50.63	50.93	51.24	51.54
62	50.22	50.53	50.84	51.15	51.46	51.77	52.08	52.39
63	51.03	51.34	51.66	51.97	52.29	52.60	52.92	53.23
64	51.84	52.16	52.48	52.80	53.12	53.44	53.76	54.08
65	52.65	52.97	53.30	53.62	53.95	54.27	54.60	54.92
66	53.46	53.79	54.12	54.45	54.78	55.11	55.44	55.77
67	54.27	54.60	54.94	55.27	55.61	55.95	56.28	56.61
68	55.08	55.42	55.76	56.10	56.44	56.78	57.12	57.46
69	55.89	56.23	56.58	56.92	57.27	57.61	57.96	58.30
70	56.70	57.05	57.40	57.75	58.10	58.45	58.80	59.15
71	57.51	57.86	58.22	58.57	58.93	59.28	59.64	59.99
72	58.32	58.68	59.04	59.40	59.76	60.12	60.48	60.84
73	59.13	59.49	59.86	60.22	60.59	60.95	61.32	61.68
74	59.94	60.31	60.68.	61.05	61.42	61.79	62.16	62.53
75	60.75	61.12	61.50	61.87	62.25	62.62	63.00	63.37
76	61.56	61.94	62.32	62.70	63.08	63.46	63.84	64.22
77	62.37	62.75	63.14	63.52	63.91	64.29	64.68	65.06
78	63.18	63.57	63.96	64.35	64.74	65.13	65.52	65.91
79	63.99	64.38	64.78	65.17	65.57	65.96	66.36	66.75
80	64.80	65.20	65.60	66.00	66.40	66.80	67.20	67.60
81	65.61	66.01	66.42	66.82	67.23	67.63	68.04	68.44
82	66.42	66.83	67.24	67.65	68.06	68.47	68.88	69.29
83	67.23	67.64	68.06	68.47	68.89	69.30	69.72	70.13
84	68.04	68.46	68.88	69.30	69.72	70.14	70.56	70.98
85	68.85	69.27	69.70	70.12	70.55	70.97	71.40	71.82

True per cent. of proof.	WINE-GALLONS.							
	81	81½	82	82½	83	83½	84	84½
86...	69.66	70.09	70.52	70.95	71.38	71.81	72.24	72.67
87...	70.47	70.90	71.34	71.77	72.21	72.64	73.08	73.51
88...	71.28	71.72	72.16	72.60	73.04	73.48	73.92	74.36
89...	72.09	72.53	72.98	73.42	73.87	74.31	74.76	75.20
90...	72.90	73.35	73.80	74.25	74.70	75.15	75.60	76.05
91...	73.71	74.16	74.62	75.07	75.53	75.98	76.44	76.89
92...	74.52	74.98	75.44	75.90	76.36	76.82	77.28	77.74
93...	75.33	75.79	76.26	76.72	77.19	77.65	78.12	78.58
94...	76.14	76.61	77.08	77.55	78.02	78.49	78.96	79.43
95...	76.95	77.42	77.90	78.37	78.85	79.32	79.80	80.27
96...	77.76	78.24	78.72	79.20	79.68	80.16	80.64	81.12
97...	78.57	79.05	79.54	80.02	80.51	80.99	81.48	81.96
98...	79.38	79.87	80.36	80.85	81.34	81.83	82.32	82.81
99...	80.19	80.68	81.18	81.67	82.17	82.66	83.16	83.65
100...	81.00	81.50	82.00	82.50	83.00	83.50	84.00	84.50
101...	81.81	82.31	82.82	83.32	83.83	84.33	84.84	85.34
102...	82.62	83.13	83.64	84.15	84.66	85.17	85.68	86.19
103...	83.43	83.94	84.46	84.97	85.49	86.00	86.52	87.03
104...	84.24	84.76	85.28	85.80	86.32	86.84	87.36	87.88
105...	85.05	85.57	86.10	86.62	87.15	87.67	88.20	88.72
106...	85.86	86.39	86.92	87.45	87.98	88.51	89.04	89.57
107...	86.67	87.20	87.74	88.27	88.81	89.34	89.88	90.41
108...	87.48	88.02	88.56	89.10	89.64	90.18	90.72	91.26
109...	88.29	88.83	89.38	89.92	90.47	91.01	91.56	92.10
110...	89.10	89.65	90.20	90.75	91.30	91.85	92.40	92.95
111...	89.91	90.46	91.02	91.57	92.13	92.68	93.24	93.70
112...	90.72	91.28	91.84	92.40	92.96	93.52	94.08	94.64
113...	91.53	92.09	92.66	93.22	93.79	94.35	94.92	95.48
114...	92.34	92.91	93.48	94.05	94.62	95.19	95.76	96.33
115...	93.15	93.72	94.30	94.87	95.45	96.02	96.60	97.17
116...	93.96	94.54	95.12	95.70	96.28	96.86	97.44	98.02
117...	94.77	95.35	95.94	96.52	97.11	97.69	98.28	98.86
118...	95.58	96.17	96.76	97.35	97.94	98.53	99.12	99.71
119...	96.39	96.98	97.58	98.17	98.77	99.36	99.96	100.55
120...	97.20	97.80	98.40	99.00	99.60	100.20	100.80	101.40
121...	98.01	98.61	99.22	99.82	100.43	101.03	101.64	102.24
122...	98.82	99.43	100.04	100.65	101.26	101.87	102.48	103.09
123...	99.63	100.24	100.86	101.47	102.09	102.70	103.32	103.93
124...	100.44	101.06	101.68	102.30	102.92	103.54	104.16	104.78
125...	101.25	101.87	102.50	103.12	103.75	104.37	105.00	105.62
126...	102.06	102.69	103.32	103.95	104.58	105.21	105.84	106.47
127...	102.87	103.50	104.14	104.77	105.41	106.04	106.68	107.31
128...	103.68	104.32	104.96	105.60	106.24	106.88	107.52	108.16
129...	104.49	105.13	105.78	106.42	107.07	107.71	108.36	109.00
130...	105.30	105.95	106.60	107.25	107.90	108.55	109.20	109.85
131...	106.11	106.76	107.42	108.07	108.73	109.38	110.04	110.69

True per cent. of proof.	WINE-GALLONS.							
	81	81½	82	82½	83	83½	84	84½
132...	106.92	107.58	108.24	108.90	109.56	110.22	110.88	111.54
133...	107.73	108.39	109.06	109.72	110.39	111.05	111.72	112.38
134...	108.54	109.21	109.88	110.55	111.22	111.89	112.56	113.23
135...	109.35	110.02	110.70	111.37	112.05	112.72	113.40	114.07
136...	110.16	110.84	111.52	112.20	112.88	113.56	114.24	114.92
137...	110.97	111.65	112.34	113.02	113.71	114.39	115.08	115.76
138...	111.78	112.47	113.16	113.85	114.54	115.23	115.92	116.61
139...	112.59	113.28	113.98	114.67	115.37	116.06	116.76	117.45
140...	113.40	114.10	114.80	115.50	116.20	116.90	117.60	118.30
141...	114.21	114.91	115.62	116.32	117.03	117.73	118.44	119.14
142...	115.02	115.73	116.44	117.15	117.86	118.57	119.28	119.99
143...	115.83	116.54	117.26	117.97	118.69	119.40	120.12	120.83
144...	116.64	117.36	118.08	118.80	119.52	120.24	120.96	121.68
145...	117.45	118.17	118.90	119.62	120.35	121.07	121.80	122.52
146...	118.26	118.99	119.72	120.45	121.18	121.91	122.64	123.37
147...	119.07	119.80	120.54	121.27	122.01	122.74	123.48	124.21
148...	119.88	120.62	121.36	122.10	122.84	123.58	124.32	125.06
149...	120.69	121.43	122.18	122.92	123.67	124.41	125.16	125.90
150...	121.50	122.25	123.00	123.75	124.50	125.25	126.00	126.75
151...	122.31	123.06	123.82	124.57	125.33	126.08	126.84	127.59
152...	123.12	123.88	124.64	125.40	126.16	126.92	127.68	128.44
153...	123.93	124.69	125.46	126.22	126.99	127.75	128.52	129.28
154...	124.74	125.51	126.28	127.05	127.82	128.59	129.36	130.13
155...	125.55	126.32	127.10	127.87	128.65	129.42	130.20	130.97
156...	126.36	127.14	127.92	128.70	129.48	130.26	131.04	131.82
157...	127.17	127.95	128.74	129.52	130.31	131.09	131.88	132.66
158...	127.98	128.77	129.56	130.35	131.14	131.93	132.72	133.51
159...	128.79	129.58	130.38	131.17	131.97	132.76	133.56	134.35
160...	129.60	130.40	131.20	132.00	132.80	133.60	134.40	135.20

True per cent. of proof.	WINE-GALLONS.							
	85	85½	86	86½	87	87½	88	88½
40	34.00	34.20	34.40	34.60	34.80	35.00	35.20	35.40
41	34.85	35.05	35.26	35.46	35.67	35.87	36.08	36.28
42	35.70	35.91	36.12	36.33	36.54	36.75	36.96	37.17
43	36.55	36.76	36.98	37.19	37.41	37.62	37.84	38.05
44	37.40	37.62	37.84	38.06	38.28	38.50	38.72	38.94
45	38.25	38.47	38.70	38.92	39.15	39.37	39.60	39.82
46	39.10	39.33	39.56	39.79	40.02	40.25	40.48	40.71
47	39.95	40.18	40.42	40.65	40.89	41.12	41.36	41.59
48	40.80	41.04	41.28	41.52	41.76	42.00	42.24	42.48
49	41.65	41.89	42.14	42.38	42.63	42.87	43.12	43.36
50	42.50	42.75	43.00	43.25	43.50	43.75	44.00	44.25
51	43.35	43.60	43.86	44.11	44.37	44.62	44.88	45.13
52	44.20	44.46	44.72	44.98	45.24	45.50	45.76	46.02
53	45.05	45.31	45.58	45.84	46.11	46.37	46.64	46.90
54	45.90	46.17	46.44	46.71	46.98	47.25	47.52	47.79
55	46.75	47.02	47.30	47.57	47.85	48.12	48.40	48.67
56	47.60	47.88	48.16	48.44	48.72	49.00	49.28	49.56
57	48.45	48.73	49.02	49.30	49.59	49.87	50.16	50.44
58	49.30	49.59	49.88	50.17	50.46	50.75	51.04	51.33
59	50.15	50.44	50.74	51.03	51.33	51.62	51.92	52.21
60	51.00	51.30	51.60	51.90	52.20	52.50	52.80	53.10
61	51.85	52.15	52.46	52.76	53.07	53.37	53.68	53.98
62	52.70	53.01	53.32	53.63	53.94	54.25	54.56	54.87
63	53.55	53.86	54.18	54.49	54.81	55.12	55.44	55.75
64	54.40	54.72	55.04	55.36	55.68	56.00	56.32	56.64
65	55.25	55.57	55.90	56.22	56.55	56.87	57.20	57.52
66	56.10	56.43	56.76	57.09	57.42	57.75	58.08	58.41
67	56.95	57.28	57.62	57.95	58.29	58.62	58.96	59.29
68	57.80	58.14	58.48	58.82	59.16	59.50	59.84	60.18
69	58.65	58.99	59.34	59.68	60.03	60.37	60.72	61.06
70	59.50	59.85	60.20	60.55	60.90	61.25	61.60	61.95
71	60.35	60.70	61.06	61.41	61.77	62.12	62.48	62.83
72	61.20	61.56	61.92	62.28	62.64	63.00	63.36	63.72
73	62.05	62.41	62.78	63.14	63.51	63.87	64.24	64.60
74	62.90	63.27	63.64	64.01	64.38	64.75	65.12	65.49
75	63.75	64.12	64.50	64.87	65.25	65.62	66.00	66.37
76	64.60	64.98	65.36	65.74	66.12	66.50	66.88	67.26
77	65.45	65.83	66.22	66.60	66.99	67.37	67.76	68.14
78	66.30	66.69	67.08	67.47	67.86	68.25	68.64	69.03
79	67.15	67.54	67.94	68.33	68.73	69.12	69.52	69.91
80	68.00	68.40	68.80	69.20	69.60	70.00	70.40	70.80
81	68.85	69.25	69.66	70.06	70.47	70.87	71.28	71.68
82	69.70	70.11	70.52	70.93	71.34	71.75	72.16	72.57
83	70.55	70.96	71.38	71.79	72.21	72.62	73.04	73.45
84	71.40	71.82	72.24	72.66	73.08	73.50	73.92	74.34
85	72.25	72.67	73.10	73.52	73.95	74.37	74.80	75.22

True per cent. of proof.	WINE-GALLONS.							
	85	85½	86	86½	87	87½	88	88½
86...	73.10	73.53	73.96	74.39	74.82	75.25	75.68	76.11
87...	73.95	74.38	74.82	75.25	75.69	76.12	76.56	76.99
88...	74.80	75.24	75.68	76.12	76.56	77.00	77.44	77.88
89...	75.65	76.09	76.54	76.98	77.43	77.87	78.32	78.76
90...	76.50	76.95	77.40	77.85	78.30	78.75	79.20	79.65
91...	77.35	77.80	78.26	78.71	79.17	79.62	80.08	80.53
92...	78.20	78.66	79.12	79.58	80.04	80.50	80.96	81.42
93...	79.05	79.51	79.98	80.44	80.91	81.37	81.84	82.30
94...	79.90	80.37	80.84	81.31	81.78	82.25	82.72	83.19
95...	80.75	81.22	81.70	82.17	82.65	83.12	83.60	84.07
96...	81.60	82.08	82.56	83.04	83.52	84.00	84.48	84.96
97...	82.45	82.93	83.42	83.90	84.39	84.87	85.36	85.84
98...	83.30	83.79	84.28	84.77	85.26	85.75	86.24	86.73
99...	84.15	84.64	85.14	85.63	86.13	86.62	87.12	87.61
100...	85.00	85.50	86.00	86.50	87.00	87.50	88.00	88.50
101...	85.85	86.35	86.86	87.36	87.87	88.37	88.88	89.38
102...	86.70	87.21	87.72	88.23	88.74	89.25	89.76	90.27
103...	87.55	88.06	88.58	89.09	89.61	90.12	90.64	91.15
104...	88.40	88.92	89.44	89.96	90.48	91.00	91.52	92.04
105...	89.25	89.77	90.30	90.82	91.35	91.87	92.40	92.92
106...	90.10	90.63	91.16	91.69	92.22	92.75	93.28	93.81
107...	90.95	91.48	92.02	92.55	93.09	93.62	94.16	94.69
108...	91.80	92.34	92.88	93.42	93.96	94.50	95.04	95.58
109...	92.65	93.19	93.74	94.28	94.83	95.37	95.92	96.46
110...	93.50	94.05	94.60	95.15	95.70	96.25	96.80	97.35
111...	94.35	94.90	95.46	96.01	96.57	97.12	97.68	98.23
112...	95.20	95.76	96.32	96.88	97.44	98.00	98.56	99.12
113...	96.05	96.61	97.18	97.74	98.31	98.87	99.44	100.00
114...	96.90	97.47	98.04	98.61	99.18	99.75	100.32	100.89
115...	97.75	98.32	98.90	99.47	100.05	100.62	101.20	101.77
116...	98.60	99.18	99.76	100.34	100.92	101.50	102.08	102.66
117...	99.45	100.03	100.62	101.20	101.79	102.37	102.96	103.54
118...	100.30	100.89	101.48	102.07	102.66	103.25	103.84	104.43
119...	101.15	101.74	102.34	102.93	103.53	104.12	104.72	105.31
120...	102.00	102.60	103.20	103.80	104.40	105.00	105.60	106.20
121...	102.85	103.45	104.06	104.66	105.27	105.87	106.48	107.08
122...	103.70	104.31	104.92	105.53	106.14	106.75	107.36	107.97
123...	104.55	105.16	105.78	106.39	107.01	107.62	108.24	108.85
124...	105.40	106.02	106.64	107.26	107.88	108.50	109.12	109.74
125...	106.25	106.87	107.50	108.12	108.75	109.37	110.00	110.62
126...	107.10	107.73	108.36	108.99	109.62	110.25	110.88	111.51
127...	107.95	108.58	109.22	109.85	110.49	111.12	111.76	112.39
128...	108.80	109.44	110.08	110.72	111.36	112.00	112.64	113.28
129...	109.65	110.29	110.94	111.58	112.23	112.87	113.52	114.16
130...	110.50	111.15	111.80	112.45	113.10	113.75	114.40	115.05
131...	111.35	112.00	112.66	113.31	113.97	114.62	115.28	115.93

True per cent. of proof.	WINE-GALLONS.							
	85	85½	86	86½	87	87½	88	88½
132...	112.20	112.86	113.52	114.18	114.84	115.50	116.16	116.82
133...	113.05	113.71	114.38	115.04	115.71	116.37	117.04	117.70
134...	113.90	114.57	115.24	115.91	116.58	117.25	117.92	118.59
135...	114.75	115.42	116.10	116.77	117.45	118.12	118.80	119.47
136...	115.60	116.28	116.96	117.64	118.32	119.00	119.68	120.36
137...	116.45	117.13	117.82	118.50	119.19	119.87	120.56	121.24
138...	117.30	117.99	118.68	119.37	120.06	120.75	121.44	122.13
139...	118.15	118.84	119.54	120.23	120.93	121.62	122.32	123.01
140...	119.00	119.70	120.40	121.10	121.80	122.50	123.20	123.90
141...	119.85	120.55	121.26	121.96	122.67	123.37	124.08	124.78
142...	120.70	121.41	122.12	122.83	123.54	124.25	124.96	125.67
143...	121.55	122.26	122.98	123.69	124.41	125.12	125.84	126.55
144...	122.40	123.12	123.84	124.56	125.28	126.00	126.72	127.44
145...	123.25	123.97	124.70	125.42	126.15	126.87	127.60	128.32
146...	124.10	124.83	125.56	126.29	127.02	127.75	128.48	129.21
147...	124.95	125.68	126.42	127.15	127.89	128.62	129.36	130.09
148...	125.80	126.54	127.28	128.02	128.76	129.50	130.24	130.98
149...	126.65	127.39	128.14	128.88	129.63	130.37	131.12	131.86
150...	127.50	128.25	129.00	129.75	130.50	131.25	132.00	132.75
151...	128.35	129.10	129.86	130.61	131.37	132.12	132.88	133.63
152...	129.20	129.96	130.72	131.48	132.24	133.00	133.76	134.52
153...	130.05	130.81	131.58	132.34	133.11	133.87	134.64	135.40
154...	130.90	131.67	132.44	133.21	133.98	134.75	135.52	136.29
155...	131.75	132.52	133.30	134.07	134.85	135.62	136.40	137.17
156...	132.60	133.38	134.16	134.94	135.72	136.50	137.28	138.06
157...	133.45	134.23	135.02	135.80	136.59	137.37	138.16	138.94
158...	134.30	135.09	135.88	136.67	137.46	138.25	139.04	139.83
159...	135.15	135.94	136.74	137.53	138.33	139.12	139.92	140.71
160...	136.00	136.80	137.60	138.40	139.20	140.00	140.80	141.60

True per cent. of proof.	WINE-GALLONS.							
	89	89½	90	90½	91	91½	92	92½
40	35.60	35.80	36.00	36.20	36.40	36.60	36.80	37.00
41	36.49	36.69	36.90	37.10	37.31	37.51	37.72	37.92
42	37.38	37.59	37.80	38.01	38.22	38.43	38.64	38.85
43	38.27	38.48	38.70	38.91	39.13	39.34	39.56	39.77
44	39.16	39.38	39.60	39.82	40.04	40.26	40.48	40.70
45	40.05	40.27	40.50	40.72	40.95	41.17	41.40	41.62
46	40.94	41.17	41.40	41.63	41.86	42.09	42.32	42.55
47	41.83	42.06	42.30	42.53	42.77	43.00	43.24	43.47
48	42.72	42.96	43.20	43.44	43.68	43.92	44.16	44.40
49	43.61	43.85	44.10	44.34	44.59	44.83	45.08	45.32
50	44.50	44.75	45.00	45.25	45.50	45.75	46.00	46.25
51	45.39	45.64	45.90	46.15	46.41	46.66	46.92	47.17
52	46.28	46.54	46.80	47.06	47.32	47.58	47.84	48.10
53	47.17	47.43	47.70	47.96	48.23	48.49	48.76	49.02
54	48.06	48.33	48.60	48.87	49.14	49.41	49.68	49.95
55	48.95	49.22	49.50	49.77	50.05	50.32	50.60	50.87
56	49.84	50.12	50.40	50.68	50.96	51.24	51.52	51.80
57	50.73	51.01	51.30	51.58	51.87	52.15	52.44	52.72
58	51.62	51.91	52.20	52.49	52.78	53.07	53.36	53.65
59	52.51	52.80	53.10	53.39	53.69	53.98	54.28	54.57
60	53.40	53.70	54.00	54.30	54.60	54.90	55.20	55.50
61	54.29	54.59	54.90	55.20	55.51	55.81	56.12	56.42
62	55.18	55.49	55.80	56.11	56.42	56.73	57.04	57.35
63	56.07	56.38	56.70	57.01	57.33	57.64	57.96	58.27
64	56.96	57.28	57.60	57.92	58.24	58.56	58.88	59.20
65	57.85	58.17	58.50	58.82	59.15	59.47	59.80	60.12
66	58.74	59.07	59.40	59.73	60.06	60.39	60.72	61.05
67	59.63	59.96	60.30	60.63	60.97	61.30	61.64	61.97
68	60.52	60.86	61.20	61.54	61.88	62.22	62.56	62.90
69	61.41	61.75	62.10	62.44	62.79	63.13	63.48	63.82
70	62.30	62.65	63.00	63.35	63.70	64.05	64.40	64.75
71	63.19	63.54	63.90	64.25	64.61	64.96	65.32	65.67
72	64.08	64.44	64.80	65.16	65.52	65.88	66.24	66.60
73	64.97	65.33	65.70	66.06	66.43	66.79	67.16	67.52
74	65.86	66.23	66.60	66.97	67.34	67.71	68.08	68.45
75	66.75	67.12	67.50	67.87	68.25	68.62	69.00	69.37
76	67.64	68.02	68.40	68.78	69.16	69.54	69.92	70.30
77	68.53	68.91	69.30	69.68	70.07	70.45	70.84	71.22
78	69.42	69.81	70.20	70.59	70.98	71.37	71.76	72.15
79	70.31	70.70	71.10	71.49	71.89	72.28	72.68	73.07
80	71.20	71.60	72.00	72.40	72.80	73.20	73.60	74.00
81	72.09	72.49	72.90	73.30	73.71	74.11	74.52	74.92
82	72.98	73.39	73.80	74.21	74.62	75.03	75.44	75.85
83	73.87	74.28	74.70	75.11	75.53	75.94	76.35	76.77
84	74.76	75.18	75.60	76.02	76.44	76.86	77.28	77.70
85	75.65	76.07	76.50	76.92	77.35	77.77	78.20	78.62

True per cent. of proof.	WINE-GALLONS.							
	89	89½	90	90½	91	91½	92	92½
86...	76.54	76.97	77.40	77.83	78.26	78.69	79.12	79.55
87...	77.43	77.86	78.30	78.73	79.17	79.60	80.04	80.47
88...	78.32	78.76	79.20	79.64	80.08	80.52	80.96	81.40
89...	79.21	79.65	80.10	80.54	80.99	81.43	81.88	82.32
90...	80.10	80.55	81.00	81.45	81.90	82.35	82.80	83.25
91...	80.99	81.44	81.90	82.35	82.81	83.26	83.72	84.17
92...	81.88	82.34	82.80	83.26	83.72	84.18	84.64	85.10
93...	82.77	83.23	83.70	84.16	84.63	85.09	85.56	86.02
94...	83.66	84.13	84.60	85.07	85.54	86.01	86.48	86.95
95...	84.55	85.02	85.50	85.97	86.45	86.92	87.40	87.87
96...	85.44	85.92	86.40	86.88	87.36	87.84	88.32	88.80
97...	86.33	86.81	87.30	87.78	88.27	88.75	89.24	89.72
98...	87.22	87.71	88.20	88.69	89.18	89.67	90.16	90.65
99...	88.11	88.60	89.10	89.59	90.09	90.58	91.08	91.57
100...	89.00	89.50	90.00	90.50	91.00	91.50	92.00	92.50
101...	89.89	90.39	90.90	91.40	91.91	92.41	92.92	93.42
102...	90.78	91.29	91.80	92.31	92.82	93.33	93.84	94.35
103...	91.67	92.18	92.70	93.21	93.73	94.24	94.76	95.27
104...	92.56	93.08	93.60	94.12	94.64	95.16	95.68	96.20
105...	93.45	93.97	94.50	95.02	95.55	96.07	96.60	97.12
106...	94.34	94.87	95.40	95.93	96.46	96.99	97.52	98.05
107...	95.23	95.76	96.30	96.83	97.37	97.90	98.44	98.97
108...	96.12	96.66	97.20	97.74	98.28	98.82	99.36	99.90
109...	97.01	97.55	98.10	98.64	99.19	99.73	100.28	100.82
110...	97.90	98.45	99.00	99.55	100.10	100.65	101.20	101.75
111...	98.79	99.34	99.90	100.45	101.01	101.56	102.12	102.67
112...	99.68	100.24	100.80	101.36	101.92	102.48	103.04	103.60
113...	100.57	101.13	101.70	102.26	102.83	103.39	103.96	104.52
114...	101.46	102.03	102.60	103.17	103.74	104.31	104.88	105.45
115...	102.35	102.92	103.50	104.07	104.65	105.22	105.80	106.37
116...	103.24	103.82	104.40	104.98	105.56	106.14	106.72	107.30
117...	104.13	104.71	105.30	105.88	106.47	107.05	107.64	108.22
118...	105.02	105.61	106.20	106.79	107.38	107.97	108.56	109.15
119...	105.91	106.50	107.10	107.69	108.29	108.88	109.48	110.07
120...	106.80	107.40	108.00	108.60	109.20	109.80	110.40	111.00
121...	107.69	108.29	108.90	109.50	110.11	110.71	111.32	111.92
122...	108.58	109.19	109.80	110.41	111.02	111.63	112.24	112.85
123...	109.47	110.08	110.70	111.31	111.93	112.54	113.16	113.77
124...	110.36	110.98	111.60	112.22	112.84	113.46	114.08	114.70
125...	111.25	111.87	112.50	113.12	113.75	114.37	115.00	115.62
126...	112.14	112.77	113.40	114.03	114.66	115.29	115.92	116.55
127...	113.03	113.66	114.30	114.93	115.57	116.20	116.84	117.47
128...	113.92	114.56	115.20	115.84	116.48	117.12	117.76	118.40
129...	114.81	115.45	116.10	116.74	117.39	118.03	118.68	119.32
130...	115.70	116.35	117.00	117.65	118.30	118.95	119.60	120.25
131...	116.59	117.24	117.90	118.55	119.21	119.86	120.52	121.17

True per cent. of proof.	WINE-GALLONS.							
	89	89½	90	90½	91	91½	92	92½
132...	117.48	118.14	118.80	119.46	120.12	120.78	121.44	122.10
133...	118.37	119.03	119.70	120.36	121.03	121.69	122.33	123.02
134...	119.26	119.93	120.60	121.27	121.94	122.61	123.28	123.95
135...	120.15	120.82	121.50	122.17	122.85	123.52	124.20	124.87
136...	121.04	121.72	122.40	123.08	123.76	124.44	125.12	125.80
137...	121.93	122.61	123.30	123.98	124.67	125.35	126.04	126.72
138...	122.82	123.51	124.20	124.89	125.58	126.27	126.96	127.65
139...	123.71	124.40	125.10	125.79	126.49	127.18	127.88	128.57
140...	124.60	125.30	126.00	126.70	127.40	128.10	128.80	129.50
141...	125.49	126.19	126.90	127.60	128.31	129.01	129.72	130.42
142...	126.38	127.09	127.80	128.51	129.22	129.93	130.64	131.35
143...	127.27	127.98	128.70	129.41	130.13	130.84	131.56	132.27
144...	128.16	128.88	129.60	130.32	131.04	131.76	132.48	133.20
145...	129.05	129.77	130.50	131.22	131.95	132.67	133.40	134.12
146...	129.94	130.67	131.40	132.13	132.86	133.59	134.32	135.05
147...	130.83	131.56	132.30	133.03	133.77	134.50	135.24	135.97
148...	131.72	132.46	133.20	133.94	134.68	135.42	136.16	136.90
149...	132.61	133.35	134.10	134.84	135.59	136.33	137.08	137.82
150...	133.50	134.25	135.00	135.75	136.50	137.25	138.00	138.75
151...	134.39	135.14	135.90	136.65	137.41	138.16	138.92	139.67
152...	135.28	136.04	136.80	137.56	138.32	139.08	139.84	140.60
153...	136.17	136.93	137.70	138.46	139.23	139.99	140.76	141.52
154...	137.06	137.83	138.60	139.37	140.14	140.91	141.68	142.45
155...	137.95	138.72	139.50	140.27	141.05	141.82	142.60	143.37
156...	138.84	139.62	140.40	141.18	141.96	142.74	143.52	144.30
157...	139.73	140.51	141.30	142.08	142.87	143.65	144.44	145.22
158...	140.62	141.41	142.20	142.99	143.78	144.57	145.36	146.15
159...	141.51	142.30	143.10	143.89	144.69	145.48	146.28	147.07
160...	142.40	143.20	144.00	144.80	145.60	146.40	147.20	148.00

True per cent. of proof.	WINE-GALLONS.							
	93	93½	94	94½	95	95½	96	96½
40	37.20	37.40	37.60	37.80	38.00	38.20	38.40	38.60
41	38.13	38.33	38.54	38.74	38.95	39.15	39.36	39.56
42	39.06	39.27	39.48	39.69	39.90	40.11	40.32	40.53
43	39.99	40.20	40.42	40.63	40.85	41.06	41.28	41.49
44	40.92	41.14	41.36	41.58	41.80	42.02	42.24	42.46
45	41.85	42.07	42.30	42.52	42.75	42.97	43.20	43.42
46	42.78	43.01	43.24	43.47	43.70	43.93	44.16	44.39
47	43.71	43.94	44.18	44.41	44.65	44.88	45.12	45.35
48	44.64	44.88	45.12	45.36	45.60	45.84	46.08	46.32
49	45.57	45.81	46.06	46.30	46.55	46.79	47.04	47.28
50	46.50	46.75	47.00	47.25	47.50	47.75	48.00	48.25
51	47.43	47.68	47.94	48.19	48.45	48.70	48.96	49.21
52	48.36	48.62	48.88	49.14	49.40	49.66	49.92	50.18
53	49.29	49.55	49.82	50.08	50.35	50.61	50.88	51.14
54	50 22	50.49	50.76	51.03	51.30	51.57	51.84	52.11
55	51.15	51.42	51.70	51.97	52.25	52.52	52.80	53.07
56	52.08	52.36	52.64	52.92	53.20	53.48	53.76	54.04
57	53.01	53.29	53.58	53.86	54.15	54.43	54.72	55.00
58	53.94	54.23	54.52	54.81	55.10	55.39	55.68	55.97
59	54.87	55.16	55.46	55.75	56.05	56.34	56.64	56.93
60	55.80	56.10	56.40	56.70	57.00	57.30	57.60	57.90
61	56.73	57.03	57.34	57.64	57.95	58.25	58.56	58.86
62	57.66	57.97	58.28	58.59	58.90	59.21	59.52	59.83
63	58.59	58.90	59.22	59.53	59.85	60.16	60.48	60.79
64	59.52	59.84	60.16	60.48	60.80	61.12	61.44	61.76
65	60.45	60.77	61.10	61.42	61.75	62.07	62.40	62.72
66	61.38	61.71	62.04	62.37	62.70	63.03	63.36	63.69
67	62.31	62.64	62.98	63.31	63.65	63.98	64.32	64.65
68	63.24	63.58	63.92	64.26	64.60	64.94	65.28	65.62
69	64.17	64.51	64.86	65.20	65.55	65.89	66.24	66.58
70	65.10	65.45	65.80	66.15	66.50	66.85	67.20	67.55
71	66.03	66.38	66.74	67.09	67.45	67.80	68.16	68.51
72	66.96	67.32	67.68	68.04	68.40	68.76	69.12	69.48
73	67.89	68.25	68.62	68.98	69.35	69.71	70.08	70.44
74	68.82	69.19	69.56	69.93	70.30	70.67	71.04	71.41
75	69.75	70.12	70.50	70.87	71.25	71.62	72.00	72.37
76	70.68	71.06	71.44	71.82	72.20	72.58	72.96	73.34
77	71.61	71.99	72.38	72.76	73.15	73.53	73.92	74.30
78	72.54	72.93	73.32	73.71	74.10	74.49	74.88	75.27
79	73.47	73.86	74.26	74.65	75.05	75.44	75.84	76.23
80	74.40	74.80	75.20	75.60	76.00	76.40	76.80	77.20
81	75.33	75.73	76.14	76.54	76.95	77.35	77.76	78.16
82	76.26	76.67	77.08	77.49	77.90	78.31	78.72	79.13
83	77.19	77.60	78.02	78.43	78.85	79.26	79.68	80.09
84	78.12	78.54	78.96	79.38	79.80	80.22	80.64	81.06
85	79.05	79.47	79.90	80.32	80.75	81.17	81.60	82.02

True per cent. of proof.	WINE GALLONS.							
	93	93½	94	94½	95	95½	96	96½
86...	79.98	80.41	80.84	81.27	81.70	82.13	82.56	82.99
87...	80.91	81.34	81.78	82.21	82.65	83.08	83.52	83.95
88...	81.84	82.28	82.72	83.16	83.60	84.04	84.48	84.92
89...	82.77	83.21	83.66	84.10	84.55	84.99	85.44	85.88
90...	83.70	84.15	84.60	85.05	85.50	85.95	86.40	86.85
91...	84.63	85.08	85.54	85.99	86.45	86.90	87.36	87.81
92...	85.56	86.02	86.48	86.94	87.40	87.86	88.32	88.78
93...	86.49	86.95	87.42	87.88	88.35	88.81	89.28	89.74
94...	87.42	87.89	88.35	88.83	89.30	89.77	90.24	90.71
95...	88.35	88.82	89.30	89.77	90.25	90.72	91.20	91.67
96...	89.28	89.76	90.24	90.72	91.20	91.68	92.16	92.64
97...	90.21	90.69	91.18	91.66	92.15	92.63	93.12	93.60
98...	91.14	91.63	92.12	92.61	93.10	93.59	94.08	94.57
99...	92.07	92.56	93.06	93.55	94.05	94.54	95.04	95.53
100...	93.00	93.50	94.00	94.50	95.00	95.50	96.00	96.50
101...	93.93	94.43	94.94	95.44	95.95	96.45	96.96	97.46
102...	94.86	95.37	95.88	96.39	96.90	97.41	97.92	98.43
103...	95.79	96.30	96.82	97.33	97.85	98.36	98.88	99.39
104...	96.72	97.24	97.76	98.28	98.80	99.32	99.84	100.36
105...	97.65	98.17	98.70	99.22	99.75	100.27	100.80	101.32
106...	98.58	99.11	99.64	100.17	100.70	101.23	101.76	102.29
107...	99.51	100.04	100.58	101.11	101.65	102.18	102.72	103.25
108...	100.44	100.98	101.52	102.06	102.60	103.14	103.68	104.22
109...	101.37	101.91	102.46	103.00	103.55	104.09	104.64	105.18
110...	102.30	102.85	103.40	103.95	104.50	105.05	105.60	106.15
111...	103.23	103.78	104.34	104.89	105.45	106.00	106.56	107.11
112...	104.16	104.72	105.28	105.84	106.40	106.96	107.52	108.08
113...	105.09	105.65	106.22	106.78	107.35	107.91	108.48	109.04
114...	106.02	106.59	107.16	107.73	108.30	108.87	109.44	110.01
115...	106.95	107.52	108.10	108.67	109.25	109.82	110.40	110.97
116...	107.88	108.46	109.04	109.62	110.20	110.78	111.36	111.94
117...	108.81	109.39	109.98	110.56	111.15	111.73	112.32	112.90
118...	109.74	110.33	110.92	111.51	112.10	112.69	113.28	113.87
119...	110.67	111.26	111.86	112.45	113.05	113.64	114.24	114.83
120...	111.60	112.20	112.80	113.40	114.00	114.60	115.20	115.80
121...	112.53	113.13	113.74	114.34	114.95	115.55	116.16	116.76
122...	113.46	114.07	114.68	115.29	115.90	116.51	117.12	117.73
123...	114.39	115.00	115.62	116.23	116.85	117.46	118.08	118.69
124...	115.32	115.94	116.56	117.18	117.80	118.42	119.04	119.66
125...	116.25	116.87	117.50	118.12	118.75	119.37	120.00	120.62
126...	117.18	117.81	118.44	119.07	119.70	120.33	120.96	121.59
127...	118.11	118.74	119.38	120.01	120.65	121.28	121.92	122.55
128...	119.04	119.68	120.32	120.96	121.60	122.24	122.88	123.52
129...	119.97	120.61	121.26	121.90	122.55	123.19	123.84	124.48
130...	120.90	121.55	122.20	122.85	123.50	124.15	124.80	125.45
131...	121.83	122.48	123.14	123.79	124.45	125.10	125.76	126.41

True per cent. of proof.	WINE-GALLONS.							
	93	93½	94	94½	95	95½	96	96½
132...	122.76	123.42	124.08	124.74	125.40	126.06	126.72	127.38
133...	123.69	124.35	125.02	125.68	126.35	127.01	127.68	128.34
134...	124.62	125.29	125.96	126.63	127.30	127.97	128.64	129.31
135...	125.55	126.22	126.90	127.57	128.25	128.92	129.60	130.27
136...	126.48	127.16	127.84	128.52	129.20	129.88	130.56	131.24
137...	127.41	128.09	128.78	129.46	130.15	130.83	131.52	132.20
138...	128.34	129.03	129.72	130.41	131.10	131.79	132.48	133.17
139...	129.27	129.96	130.66	131.35	132.05	132.74	133.44	134.13
140...	130.20	130.90	131.60	132.30	133.00	133.70	134.40	135.10
141...	131.13	131.83	132.54	133.24	133.95	134.65	135.36	136.06
142...	132.06	132.77	133.48	134.19	134.90	135.61	136.32	137.03
143...	132.99	133.70	134.42	135.13	135.85	136.56	137.28	137.99
144...	133.92	134.64	135.36	136.08	136.80	137.52	138.24	138.96
145...	134.85	135.57	136.30	137.02	137.75	138.47	139 20	139.92
146...	135.78	136.51	137.24	137.97	138.70	139.43	140.16	140.89
147...	136.71	137.44	138.18	138.91	139.65	140.38	141.12	141.85
148...	137.64	138.38	139.12	139.86	140.60	141.34	142.08	142.82
149...	138.57	139.31	140.06	140.80	141.55	142.29	143.04	143.78
150...	139.50	140.25	141.00	141.75	142.50	143.25	144.00	144.75
151...	140.43	141.18	141.94	142.69	143.45	144.20	144.96	145.71
152...	141.36	142.12	142.88	143.64	144.40	145.16	145.92	146.68
153...	142.29	143.05	143.82	144.58	145.35	146.11	146.88	147.64
154...	143.22	143.99	144.76	145.53	146.30	147.07	147.84	148.61
155...	144.15	144.92	145.70	146.47	147.25	148.02	148.80	149.57
156...	145.08	145.86	146.64	147.42	148.20	148.98	149.76	150.54
157...	146.01	146.79	147.58	148.36	149.15	149.93	150.72	151.50
158...	146.94	147.73	148.52	149.31	150.10	150.89	151.68	152.47
159...	147.87	148.66	149.46	150.25	151.05	151.84	152.64	153.43
160...	148.80	149.60	150.40	151.20	152.00	152.80	153.60	154.40

True per cent. of proof.	WINE-GALLONS.							
	97	97½	98	98½	99	99½	100	
40....	38.80	39.00	39.20	39.40	39.60	39.80	40.00	.....
41....	39.77	39.97	40.18	40.38	40.59	40.79	41.00	.....
42....	40.74	40.95	41.16	41.37	41.58	41.79	42.00	.....
43....	41.71	41.92	42.14	42.35	42.57	42.78	43.00	.....
44....	42.68	42.90	43.12	43.34	43.56	43.78	44.00	.....
45....	43.65	43.87	44.10	44.32	44.55	44.77	45.00	.....
46....	44.62	44.85	45.08	45.31	45.54	45.77	46.00	.....
47....	45.59	45.82	46.06	46.29	46.53	46.76	47.00	.....
48....	46.56	46.80	47.04	47.28	47.52	47.76	48.00	.....
49....	47.53	47.77	48.02	48.26	48.51	48.75	49.00	.....
50....	48.50	48.75	49.00	49.25	49.50	49.75	50.00	.....
51....	49.47	49.72	49.98	50.23	50.49	50.74	51.00	.....
52....	50.44	50.70	50.96	51.22	51.48	51.74	52.00	.....
53....	51.41	51.67	51.94	52.20	52.47	52.73	53.00	.....
54....	52.38	52.65	52.92	53.19	53.46	53.73	54.00	.....
55....	53.35	53.62	53.90	54.17	54.45	54.72	55.00	.....
56....	54.32	54.60	54.88	55.16	55.44	55.72	56.00	.....
57....	55.29	55.57	55.86	56.14	56.43	56.71	57.00	.....
58....	56.26	56.55	56.84	57.13	57.42	57.71	58.00	.....
59....	57.23	57.52	57.82	58.11	58.41	58.70	59.00	.....
60....	58.20	58.50	58.80	59.10	59.40	59.70	60.00	.....
61....	59.17	59.47	59.78	60.08	60.39	60.69	61.00	.....
62....	60.14	60.45	60.76	61.07	61.38	61.69	62.00	.....
63....	61.11	61.42	61.74	62.05	62.37	62.68	63.00	.....
64....	62.08	62.40	62.72	63.04	63.36	63.68	64.00	.....
65....	63.05	63.37	63.70	64.02	64.35	64.67	65.00	.....
66....	64.02	64.35	64.68	65.01	65.34	65.67	66.00	.....
67....	64.99	65.32	65.66	65.99	66.33	66.66	67.00	.....
68....	65.96	66.30	66.64	66.98	67.32	67.65	68.00	.....
69....	66.93	67.27	67.62	67.96	68.31	68.65	69.00	.....
70....	67.90	68.25	68.60	68.95	69.30	69.65	70.00	.....
71....	68.87	69.22	69.58	69.93	70.29	70.64	71.00	.....
72....	69.84	70.20	70.56	70.92	71.28	71.64	72.00	.....
73....	70.81	71.17	71.54	71.90	72.27	72.63	73.00	.....
74....	71.78	72.15	72.52	72.89	73.26	73.63	74.00	.....
75....	72.75	73.12	73.50	73.87	74.25	74.62	75.00	.....
76....	73.72	74.10	74.48	74.86	75.24	75.62	76.00	.....
77....	74.69	75.07	75.46	75.84	76.23	76.61	77.00	.....
78....	75.66	76.05	76.44	76.83	77.22	77.61	78.00	.....
79....	76.63	77.02	77.42	77.81	78.21	78.60	79.00	.....
80....	77.60	78.00	78.40	78.80	79.20	79.60	80.00	.....
81....	78.57	78.97	79.38	79.78	80.19	80.59	81.00	.....
82....	79.54	79.95	80.36	80.77	81.18	81.59	82.00	.....
83....	80.51	80.92	81.34	81.75	82.17	82.58	83.00	.....
84....	81.48	81.90	82.32	82.74	83.16	83.58	84.00	.....
85....	82.45	82.87	83.30	83.72	84.15	84.57	85.00	.....

True per cent. of proof.	WINE-GALLONS.							
	97	97½	98	98½	99	99½	100	
86...	83.42	83.85	84.28	84.71	85.14	85.57	86.00	.....
87...	84.39	84.82	85.26	85.69	86.13	86.56	87.00	.....
88...	85.36	85.80	86.24	86.68	87.12	87.56	88.00	.....
89...	86.33	86.77	87.22	87.66	88.11	88.55	89.00	.....
90...	87.30	87.75	88.20	88.65	89.10	89.55	90.00	.....
91...	88.27	88.72	89.18	89.63	90.09	90.54	91.00	.....
92...	89.24	89.70	90.16	90.62	91.08	91.54	92.00	.....
93...	90.21	90.67	91.14	91.60	92.07	92.53	93.00	.....
94...	91.18	91.65	92.12	92.59	93.06	93.53	94.00	.....
95...	92.15	92.62	93.10	93.57	94.05	94.52	95.00	.....
96...	93.12	93.60	94.08	94.56	95.04	95.52	96.00	.....
97...	94.09	94.57	95.06	95.54	96.03	96.51	97.00	.....
98...	95.06	95.55	96.04	96.53	97.02	97.51	98.00	.....
99...	96.03	96.52	97.02	97.51	98.01	98.50	99.00	.....
100...	97.00	97.50	98.00	98.50	99.00	99.50	100.00	.....
101...	97.97	98.47	98.98	99.48	99.99	100.49	101.00	.....
102...	98.94	99.45	99.96	100.47	100.98	101.49	102.00	.....
103...	99.91	100.42	100.94	101.45	101.97	102.48	103.00	.....
104...	100.88	101.40	101.92	102.44	102.96	103.48	104.00	.....
105...	101.85	102.37	102.90	103.42	103.95	104.47	105.00	.....
106...	102.82	103.35	103.88	104.41	104.94	105.47	106.00	.....
107...	103.79	104.32	104.86	105.39	105.93	106.46	107.00	.....
108...	104.76	105.30	105.84	106.38	106.92	107.46	108.00	.....
109...	105.73	106.27	106.82	107.36	107.91	108.45	109.00	.....
110...	106.70	107.25	107.80	108.35	108.90	109.45	110.00	.....
111...	107.67	108.22	108.78	109.33	109.89	110.44	111.00	.....
112...	108.64	109.20	109.76	110.32	110.88	111.44	112.00	.....
113...	109.61	110.17	110.74	111.30	111.87	112.43	113.00	.....
114...	110.58	111.15	111.72	112.29	112.86	113.43	114.00	.....
115...	111.55	112.12	112.70	113.27	113.85	114.42	115.00	.....
116...	112.52	113.10	113.68	114.26	114.84	115.42	116.00	.....
117...	113.49	114.07	114.66	115.24	115.83	116.41	117.00	.....
118..	114.46	115.05	115.64	116.23	116.82	117.41	118.00	.....
119...	115.43	116.02	116.62	117.21	117.81	118.40	119.00	.....
120...	116.40	117.00	117.60	118.20	118.80	119.40	120.00	.....
121...	117.37	117.97	118.58	119.18	119.79	120.39	121.00	.....
122...	118.34	118.95	119.56	120.17	120.78	121.39	122.00	.....
123...	119.31	119.92	120.54	121.15	121.77	122.38	123.00	.....
124...	120.28	120.90	121.52	122.14	122.76	123.38	124.00	.....
125...	121.25	121.87	122.50	123.12	123.75	124.37	125.00	.....
126...	122.22	122.85	123.48	124.11	124.74	125.37	126.00	.....
127...	123.19	123.82	124.46	125.09	125.73	126.36	127.00	.....
128...	124.16	124.80	125.44	126.08	126.72	127.36	128.00	.....
129...	125.13	125.77	126.42	127.06	127.71	128.35	129.00	.....
130...	126.10	126.75	127.40	128.05	128.70	129.35	130.00	.....
131...	127.07	127.72	128.38	129.03	129.69	130.34	131.00	.....

True per cent. of proof.	WINE-GALLONS.							
	97	97½	98	98½	99	99½	100	
132...	128.04	128.70	129.36	130.02	130.68	131.34	132.00	.....
133...	129.01	129.67	130.34	131.00	131.67	132.33	133.00	.....
134...	129.98	130.65	131.32	131.99	132.66	133.33	134.00	.....
135...	130.95	131.62	132.30	132.97	133.65	134.32	135.00	.....
136...	131.92	132.60	133.28	133.96	134.64	135.32	136.00	.....
137...	132.89	133.57	134.26	134.94	135.63	136.31	137.00	.....
138...	133.86	134.55	135.24	135.93	136.62	137.31	138.00	.....
139...	134.83	135.52	136.22	136.91	137.61	138.30	139.00	.....
140...	135.80	136.50	137.20	137.90	138.60	139.30	140.00	.....
141...	136.77	137.47	138.18	138.88	139.59	140.29	141.00	.....
142...	137.74	138.45	139.16	139.87	140.58	141.29	142.00	.....
143...	138.71	139.42	140.14	140.85	141.57	142.28	143.00	.....
144...	139.68	140.40	141.12	141.84	142.56	143.28	144.00	.....
145...	140.65	141.37	142.10	142.82	143.55	144.27	145.00	.....
146...	141.62	142.35	143.08	143.81	144.54	145.27	146.00	.....
147...	142.59	143.32	144.06	144.79	145.53	146.26	147.00	.....
148...	143.56	144.30	145.04	145.78	146.52	147.26	148.00	.....
149...	144.53	145.27	146.02	146.76	147.51	148.25	149.00	.....
150...	145.50	146.25	147.00	147.75	148.50	149.25	150.00	.....
151...	146.47	147.22	147.98	148.73	149.49	150.24	151.00	.....
152...	147.44	148.20	148.96	149.72	150.48	151.24	152.00	.....
153...	148.41	149.17	149.94	150.70	151.47	152.23	153.00	.....
154...	149.38	150.15	150.92	151.69	152.46	153.23	154.00	.....
155...	150.35	151.12	151.90	152.67	153.45	154.22	155.00	.....
156...	151.32	152.10	152.88	153.66	154.44	155.22	156.00	.....
157...	152.29	153.07	153.86	154.64	155.43	156.21	157.00	.....
158...	153.26	154.05	154.84	155.63	156.42	157.21	158.00	.....
159...	154.23	155.02	155.82	156.61	157.41	158.20	159.00	.....
160...	155.20	156.00	156.80	157.60	158.40	159.20	160.00	.....

TABLE No. III.

ULLAGE OR WANTAGE.

Beneath the dry inches, and opposite the capacity and bung diameter of the cask, is stated the ullage or wantage in wine-gallons.

The scale can be used in determining wantage under the same conditions as authorized in finding the wine-gallons capacity.

Capacity of cask.	Bung diameter.	NUMBER OF DRY INCHES.																
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
22	17	1	2	3	4½	6½	8	10	12	.....	.....	.....	.....	.....	.....	.....	.....	.....
22	18	1	2	3	4	5½	7½	9	11	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	18	1	2	3	4½	6½	8	10	12	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	19	1	2	3	4½	6	7½	9½	11	13	.....	.....	.....	.....	.....	.....	.....	.....
26	18	1	2	3½	5	7	8½	11	13	.....	.....	.....	.....	.....	.....	.....	.....	.....
26	19	1	2	3	4½	6½	8	10	12	14	.....	.....	.....	.....	.....	.....	.....	.....
28	18	1	2½	4	5½	7½	9½	11½	14	.....	.....	.....	.....	.....	.....	.....	.....	.....
28	19	1	2	3½	5	7	8½	10½	12½	14½	.....	.....	.....	.....	.....	.....	.....	.....
42	22	1	2½	4	6	8	10½	12½	15½	18	21	.....	.....	.....	.....	.....	.....	.....
43	22	1	2½	4	6½	8½	10½	13½	15½	18½	21½	.....	.....	.....	.....	.....	.....	.....
44	22	1½	2½	4	6½	8½	11	13	16	19	22	.....	.....	.....	.....	.....	.....	.....
44	23	1	2½	4	6	8	10½	12½	15	17½	20½	.....	.....	.....	.....	.....	.....	.....
45	23	1	2½	4	6	8	10½	13	15½	18	20½	23	.....	.....	.....	.....	.....	.....
45	24	1	2½	4	5½	7½	10	12	14½	17	19½	22½	.....	.....	.....	.....	.....	.....
48	23	1	2½	4½	6½	9	11½	13½	16½	19½	22	24½	.....	.....	.....	.....	.....	.....
48	24	1	2½	4	6	8	10½	13	15½	18	21½	24	.....	.....	.....	.....	.....	.....
64	24	1½	3½	5	8	11	14	17	20½	24	28	32	.....	.....	.....	.....	.....	.....
106	30	2	4	6	9½	12½	16½	20½	24½	28½	32½	38	43	47½	53	.....	.....	.....
120	31	2	4	6	9½	13	17	21½	26	31	35	40½	46	51	56½	.....	.....	.....
140	34	2	4	6½	9½	13½	17	22	26	31	36	41	46½	52	58	63½	70	.....

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